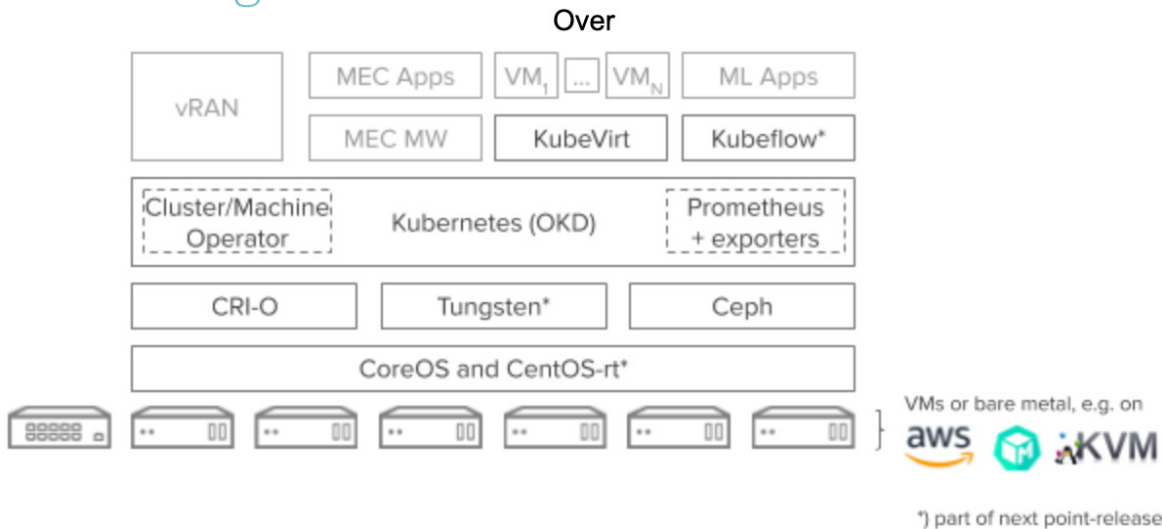


Akraino R1 includes 19+ blueprints that support a variety of edge use cases, from connected vehicles to integrated edge cloud, to Edge Lightweight and IoT, to Kubernetes Native Infrastructure and more. These blueprints are tested and validated on real hardware supported by users and community members.

## Akraino Blueprint: Kubernetes-Native Infrastructure for Provider Access Edge



Blueprints in the Kubernetes-Native Infrastructure for Edge family leverage the best-practices and tools from the Kubernetes community to declaratively and consistently manage edge computing stacks from the infrastructure up to the workloads. They support both containerized and VM-based applications on a common infrastructure and lifecycle-manage these applications using the Operator framework. Building on the Kubernetes Machine API allows users to deploy them consistently anywhere, from VMs in developer environments to bare metal production environments and from on-prem to public cloud.

The family's Provider Access Edge blueprint targets vRAN and MEC (e.g. AR/VR, machine learning, etc.) use cases. Its key features are:

- Lightweight, self-managing clusters based on CoreOS and Kubernetes (OKD distro)
- Support for VMs (via KubeVirt) and containers on a common infrastructure
- Application lifecycle management using the Operator Framework
- Support for real-time workloads using CentOS-rt\*

For more information: [wiki.akraino.org/display/AK/Provider+Access+Edge+%28PAE%29+Blueprint](https://wiki.akraino.org/display/AK/Provider+Access+Edge+%28PAE%29+Blueprint)

Akraino R1 is now available! More details available here: XXXXX

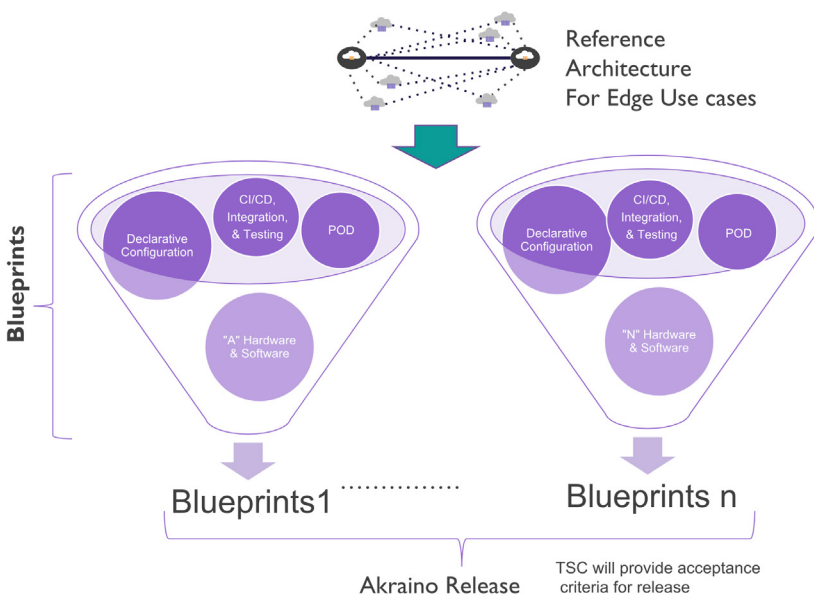
# AKRAINO EDGE STACK

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/>

## Akraino Blueprints & Release



The Akraino community is currently developing 18+ blueprints to support a wide variety of Edge use cases. The community tests and validates these blueprints on real hardware labs supported by users and community members. The first release of Akraino, scheduled for Q2 2019, will include “ready and proven” blueprints that have been validated by the Akraino community.

**Blueprints** – Approved and tested declarative configuration based on use cases, set of Hardware & Software, Point of delivery (POD).

**Reference Architecture** – Defines Akraino building blocks

**Declarative Configuration** – Hides lower layer complexity to user

**CI/CD, Integration & Testing To** Drive product quality

**Akraino release** – End Product