

# Release 1 - May 28, 2019

## Akraino Radio Edge Cloud blueprint R1 is officially released!

### Overview

Akraino Radio Edge Cloud (REC) is a latency optimized bare metal, production grade NFVI infrastructure for edge and far-edge data centers.

Akraino REC provides an appliance tuned to support the O-RAN Radio Access Network Intelligent Controller (RIC) and is the first example of the [Telco Appliance Blueprint Family](#) which provides a reusable set of modules capable of also hosting sibling blueprints for other purpose tuned appliances.

Akraino REC is based purely on open-source components, both 3<sup>rd</sup> party and in-project developed.

The project includes the hardware, operating system, IaaS, and CaaS layers. It is also natively integrated with Regional Controller (Akraino Feature Project) for “zero touch” deployment of REC to edge sites!

### Supported hardware types

- AirFrame Open Edge 19
  - Based on [Open Edge Chassis specification](#)
  - Based on [Open Edge Server specification](#)
- HPE DL380 Gen9 and Gen10
- DELL PowerEdge 740xd

### Included major 3<sup>rd</sup> party software components

- CentOS 7.6 with LTS Kernel 4.14
- Docker 18.09 CE
- Kubernetes 1.14.1
- DANM 3.2
- Ceph 12.2
- Helm 2.13
- CPU-Pooler 1.0
- Prometheus 2.8
- Elasticsearch 6.7
- Fluentd 1.4
- Ironic 10.1.4
- Keystone 13.0.2

### REC developed software components

- L3 Deployer: an Ironic-based hardware manager framework, used to automatically deploy an AKREC cluster on a set of supported servers. Does not depend on DHCP!
- YARF: “Yet-Another-REST-Framework” is the pluggable framework implementing the AKREC north-bound, centralized management API
- HostCLI: a command-line, REST API integrated interface to streamline the management of a REC cluster for human users
- CM framework: a pluggable configuration management framework to centrally manage the configuration of the infrastructure both during initial deployment, and in run-time
- A(uthentication)&A(uthorization) framework: a Keystone-based solution to centrally manage the cloud infrastructure’s users, and their various roles
- Remote installer: a module integrated to the Regional Controller feature project, capable of installing a full REC data center at the touch of a button

### Want to know more?

Why not try it yourself? Head over to the [REC Installation Guide](#) and install your very own Akraino REC cluster today!