Akraino API Work Item Proposal (Request For Feedback)

Jane Shen March 03, 2020



Edge Stack API

A list of potential work items for API sub-committee in coming releases:

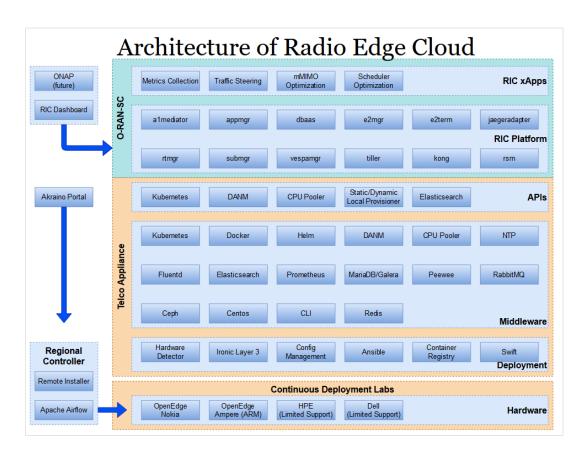
- Is there a convergence between Telco and OTT (Hyperscalers) edge stack? Why?
- How are APIs from SDOs adopted (or not) in Akraino's edge stack projects?
- > Access Gateway and Connect Gateway

We need opinions on these open questions. Akraino Projects express their opinions with stack and solution designs. There are technical considerations as well as business. These work items are to explore thoughts from telco operators and Hyperscalers on Telco Edge.

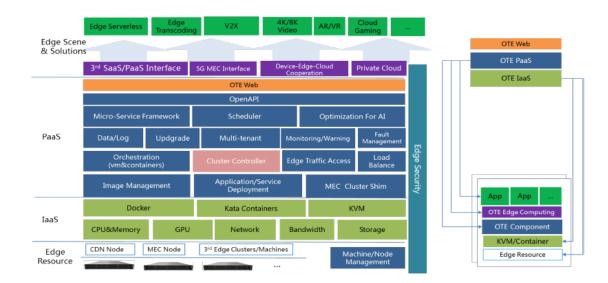
Feedback is welcomed. We would like to bring items of interest to a larger audience in our community.



Telco vs. OTT Edge Stack (2 BPs from Akraino)



- The Left is a Telco Edge function stack; Below is from Baidu as an OTT edge stack for AI applications.
- Can these stacks share common layers at the infrastructure level?
- Telco stacks orchestration and management vs. OTT stack service management





SDO's and Upstream Project Edge Related APIs

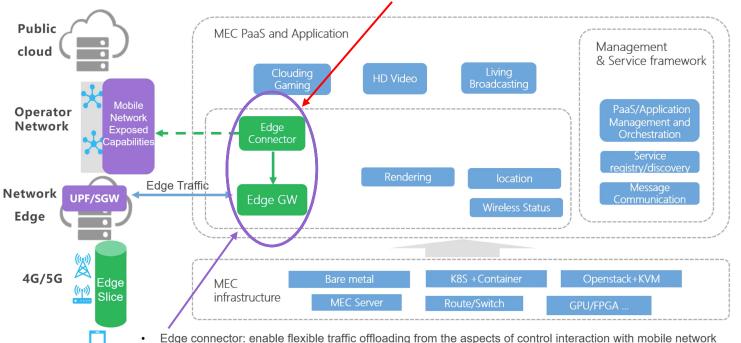
- ONAP's Edge APIs
- ETSI MEC 20+ Edge APIs
- CNTT
- ORAN-SC
- How are these leveraged (or not) in Akraino Projects?
- Operators have questions on how Akraino APIs compared to ETSI MEC's. e.g. app onboarding



Edge Access Gateway and Connect Gateway

Architecture Overview

- Can functions from Edge Connector and Edge GW be provided via a 5G slice? If not, what's missing?
- Are there specific requirements from OTT applications not provided by a 5G slice? Or is it a business consideration to do it this way? If so, what's the Biz drive?
- From Telco side, apart from the biz consideration to agree with this or not, are there technical challenges in this architecture?



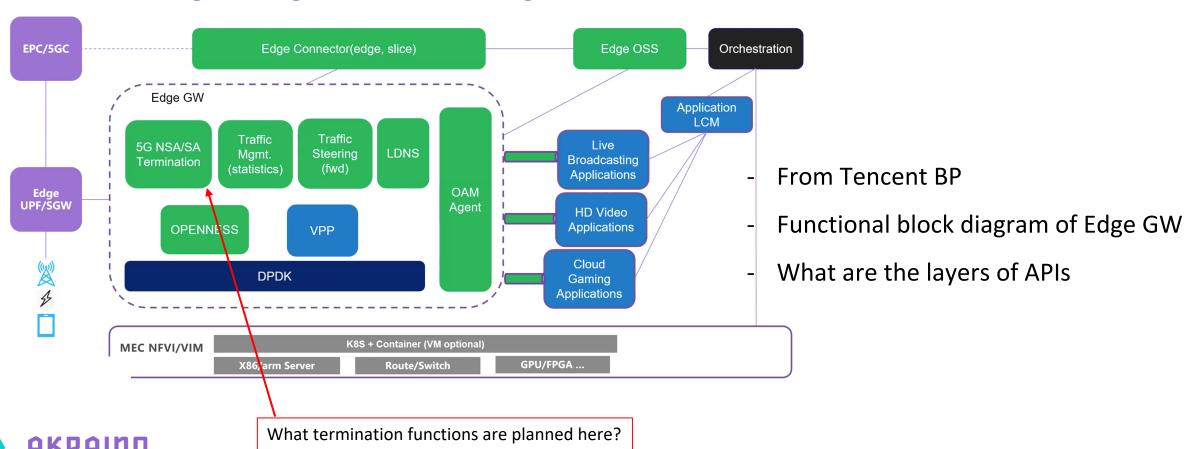
- From Tencent BP project
- What can be exposed in these GWs?
- How can these be exposed (APIs)?
- Consumption of these APIs?

- exposed capabilities, and subscribe the edge slice between UE and edge application
- Edge GW: enable the traffic offloading from the aspects of data plane with local traffic routing, traffic management and so on.



Edge Access Gateway and Connect Gateway

Architecture design for Edge Connector and Edge GW



Thank You!

