API Subcommittee Update

Infrastructure + Platform Work Group
Jeff Brower, chair
Jane Shen, co-chair
Doug Eng, Tina Tsou, Ike Alisson, Dr. Mehmet Toy, Xinhui Li

Prepared by Jeff Brower, Signalogic

Contents

Updated API Map

- Version 2 Published
- Next Steps

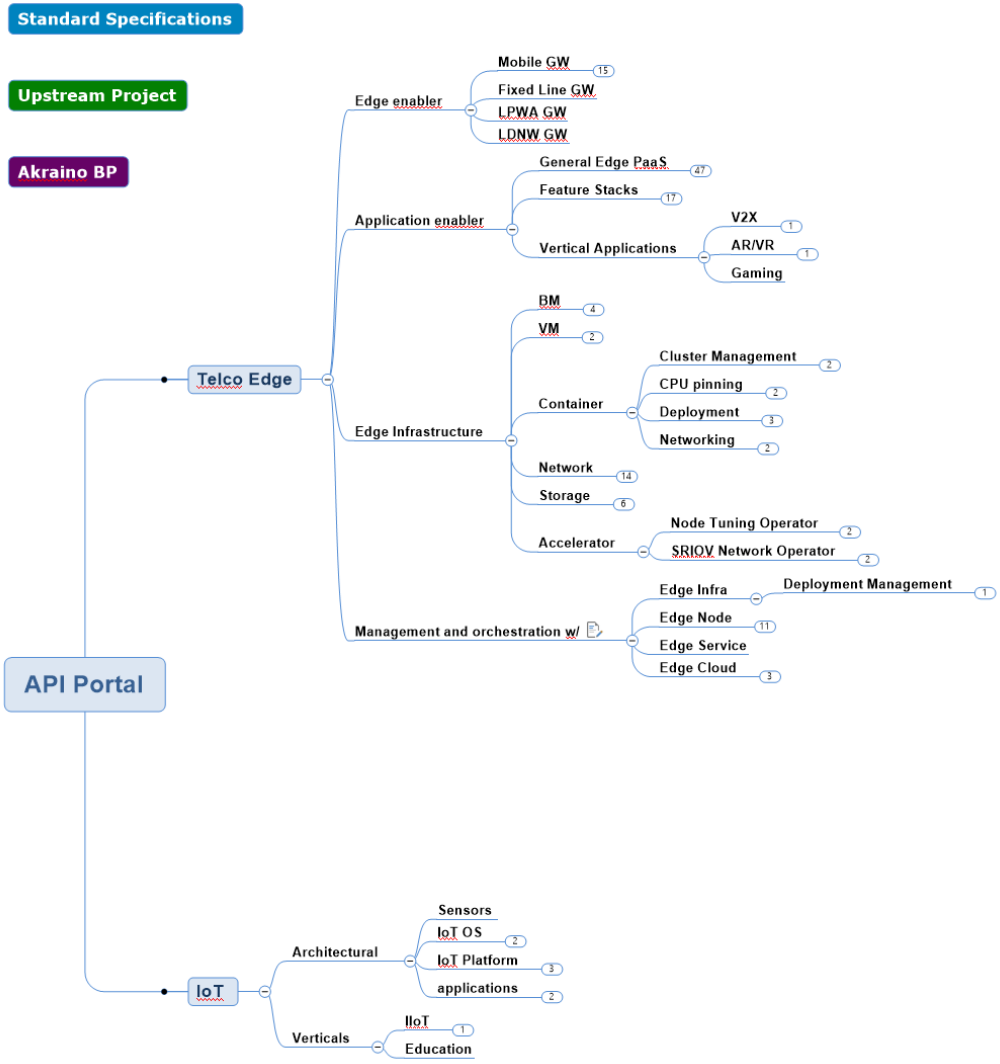
API Info Analysis

- Trends shown by the data

API Portal Status

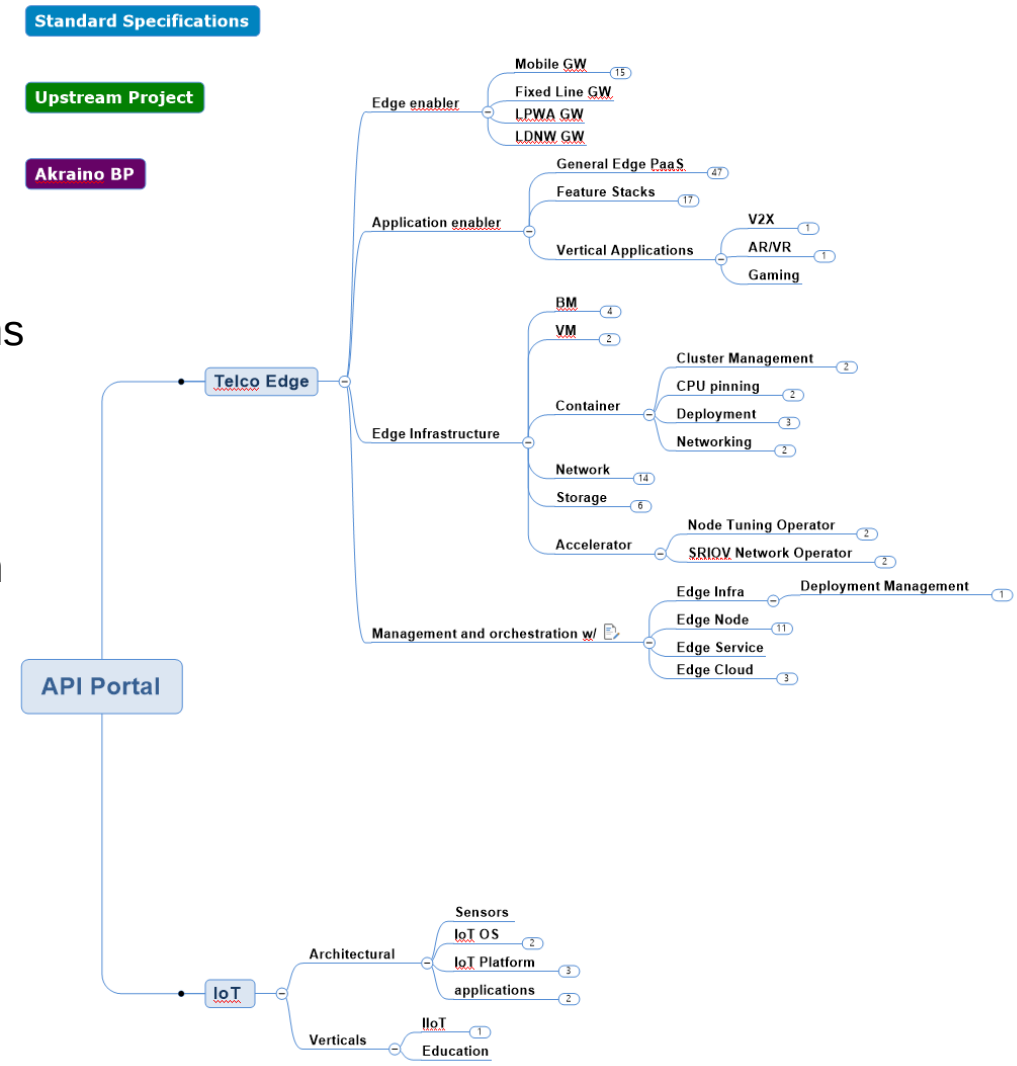
Updated API Map

- **Viewable now**
  - apiportal.akraino.org
  - Click “API Map”
- **Includes R4 info**
  - more upstream projects
  - more specs
- **IoT top level branch**
  - in addition to Telco Edge



API Map Next Steps

- **Short term items**
  - Update BP links
  - Add navigation command buttons
  - Add search filter
- **Long term**
  - Develop customer-facing search
  - more specs



API Info Analysis

- **API Gathered Data**
  - R4 is first time for gathering API data from all BPs
  - Some interesting trends revealed
- **Actionable Intelligence**
  - We can now consider commonalities
  - Are there possible common APIs between BPs ? With external organizations ?

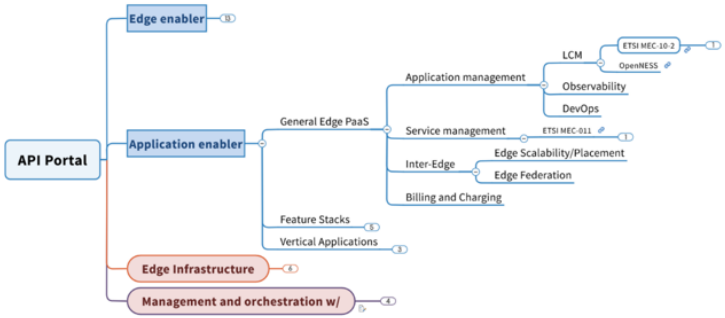


Fig 9.x Akraino API Portal[4] (copyright © Akraino API subcommittee)

The hierarchy of the map is based on the functional diagram from the whitepaper "Public Cloud Interfacing 5G Edge", written by API subcommittee. Although the whitepaper focuses on 5G Edge, the key functional blocks in the diagram applies to Telco edge in general.

For each project API set reported, the map traces back to its applicable standards adoption or upstream projects.

A summary of the Release 4 project API status is as follows:

- A majority of APIs are focused on application management and service management
- There are no APIs related to inter-edge or edge billing / charging
- There are 2 API sets in mobile network interfaces, AF-influencing and NEF
- There are rich APIs in edge infrastructure, however consolidation is desired.~~some examples include ...~~
- Kubernetes is the most adopted container management platform. Its well-defined APIs are the de facto interface specifications for container-based projects

[3] Release 4 is the first time API subcommittee makes it a mandatory requirement for each project to report APIs exposed and consumed as part of the project release review. This is a reflection of the trend in adoption of IT technologies in edge domain. APIs are increasingly used by edge stacks either to expose their capabilities or to interact with components of various implementations.

[4] https://apiportal.akraino.org/apimap.html

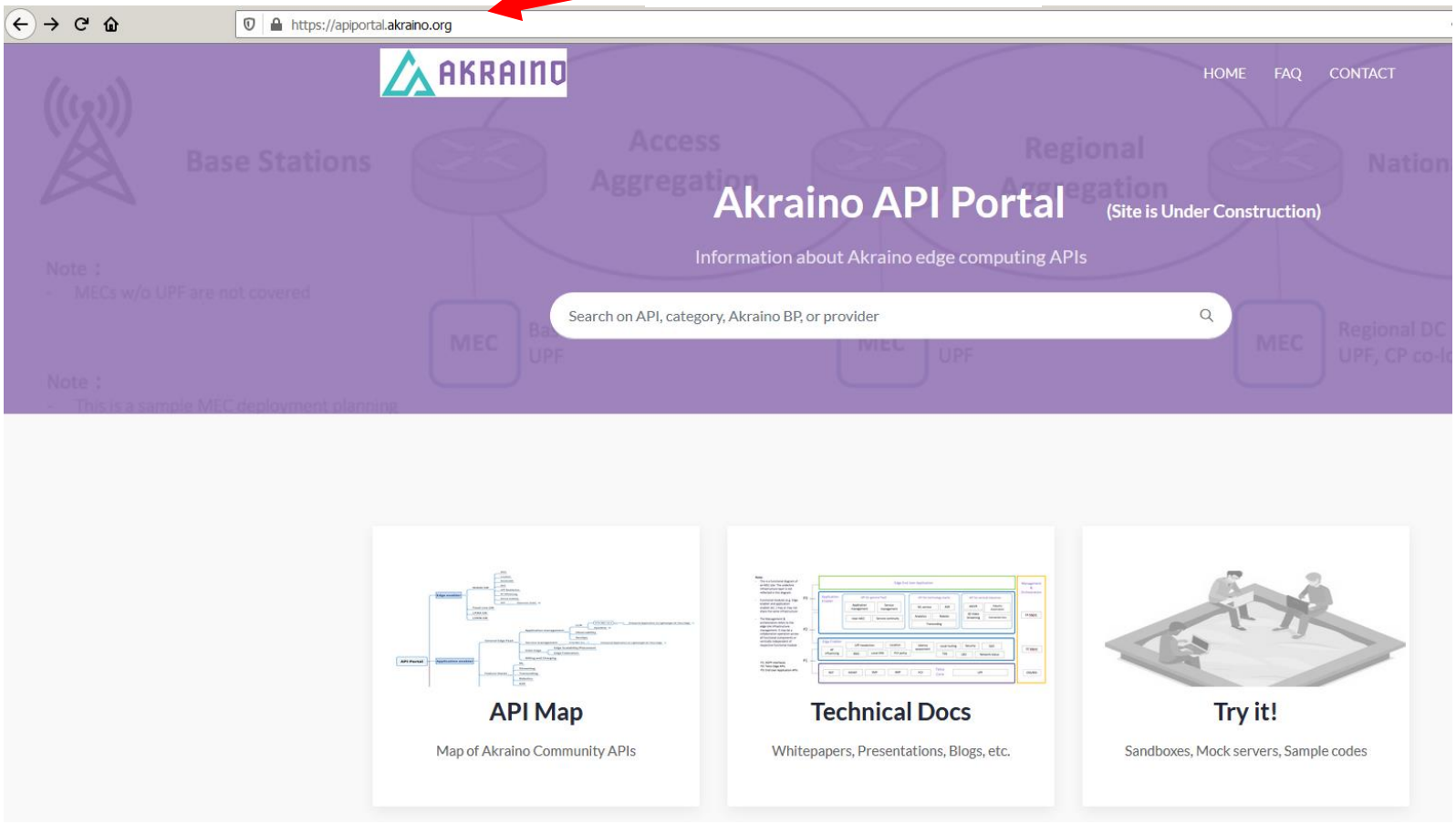
Thanks !

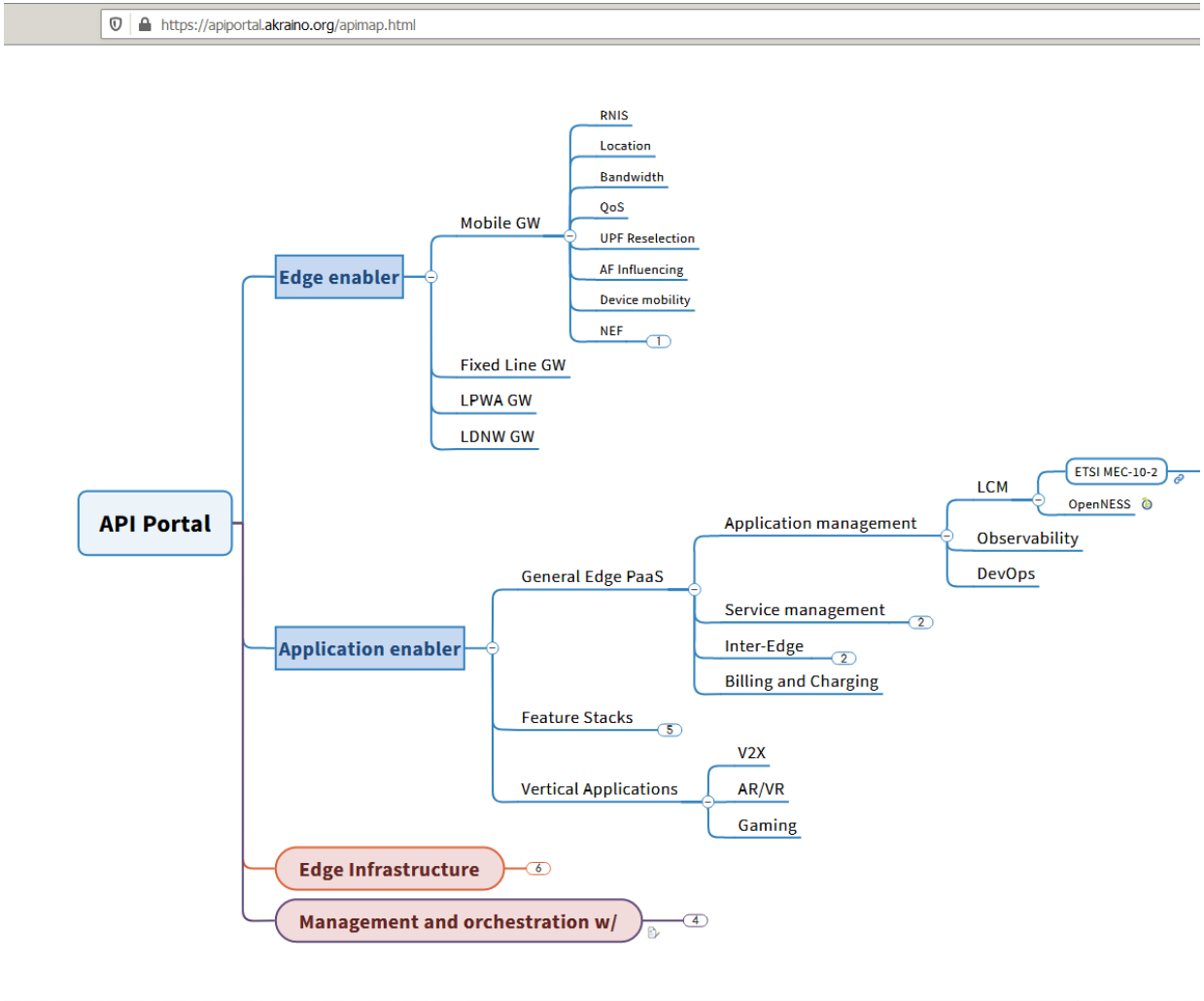
- **Q & A**

API Portal

- **Information about Akraino community edge computing APIs**
- **Alpha preliminary at this point – work in progress**

apiportal.akraino.org



API Portal, cont.

- **“API map”**
  - example at right
- **Technical docs**
- **Sandbox**
- **Search by**
  - API functional category
  - BP project
  - SDO
  - more