

API Subcommitte Update, cont.

Infrastructure + Platform Work Group
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Contents



Updated API Map

Version 2 published Next steps

API Info Analysis

Trends shown by the data

New from yesterday

Subcommittee Efforts Going Forward

Bring in new API trends from SDOs and industrial groups

Customer usability of Akraino BPs

Ensure Akraino BPs are at the leading edge of API architecture

Updated API Map



Viewable now

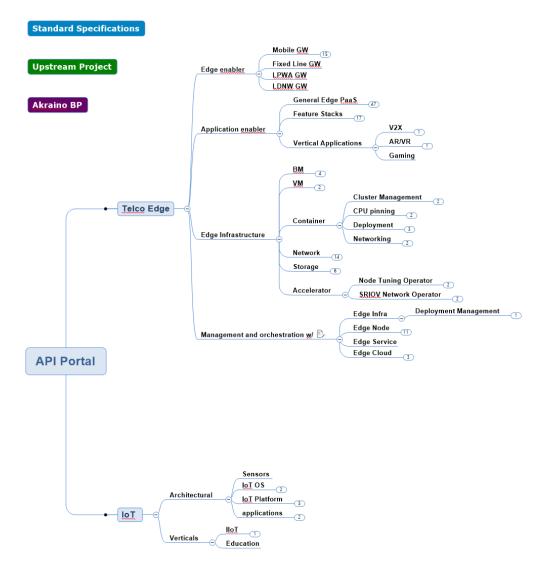
- apiportal.akraino.org
- Click "API Map"

Includes R4 info

- more upstream projects
- more specs

IoT top level branch

in addition to Telco Edge



API Map Next Steps

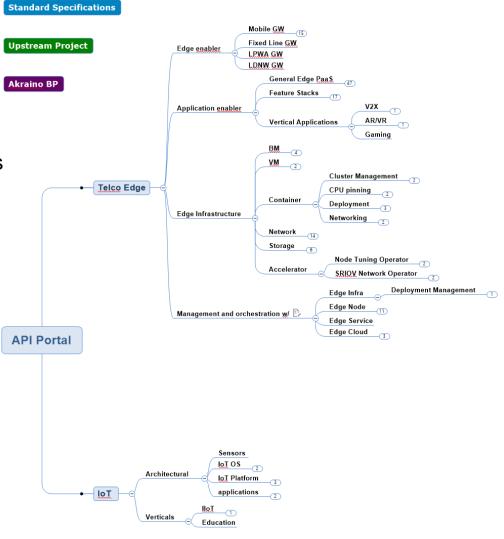


Short term items

- 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 ?

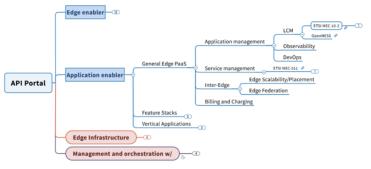


Fig 9.x Akraino API Portal4 (copyright © Akraino API subcommittee)

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,
- 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

Subcommittee Forward Looking Efforts



API Map Continued Improvements

- Publish v3 with updated BP links, code repository links (e.g. Github)
- Customer facing search

R4 API info gathering results – What BP teams can improve

- More emphasis on API architecture from Blueprint teams
- More thought on API usage by customers external to Akraino

Committee areas of exploration

- ETSI MEC & GSMA Edge Federation
- Kubernetes AD SIG (Application Delivery Special Interest Group)
- 5G Open Innovation Lab

Thanks!



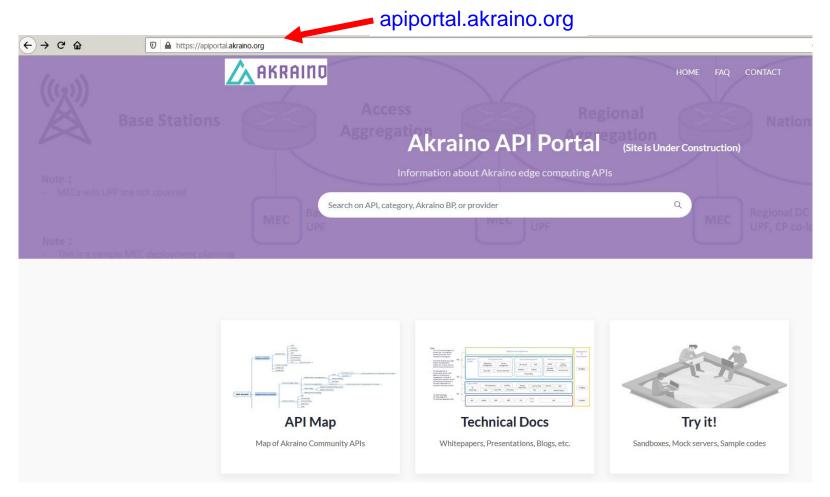
• Q&A



API Portal



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



API Portal, cont.



https://apiportal.akraino.org/apimap.html

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

