API Subcommittee Update, cont.

Infrastructure + Platform Work Group
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Updated API Map
   Version 2 published
   Next steps

API Info Analysis
   Trends shown by the data

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?

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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, **integrated configuration and deployment**
- Kubernetes is the most adopted container management platform. Its well-defined APIs are the de facto interface specifications for container-based projects

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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](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 Akraiino community edge computing APIs
- Alpha preliminary at this point – work in progress

apiportal.akraino.org
• “API map”
  – example at right

• Technical docs

• Sandbox

• Search by
  – API functional category
  – BP project
  – SDO
  – more