

PaaS with XGVela

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Time

Launch: April 30, 2020
First Meeting: May 21, 2020

Name explanation

XG: 4G, 5G, 6G XG
Vela: Sail in Latin to accelerate cloud native transformation and innovation

Status

LF unfounded project

Project links

Wiki:
<https://github.com/XGVela/XGVela/wiki>
Meeting:
<https://github.com/XGVela/XGVela/wiki/XGVela-Meetings>
Mailing list:
<https://lists.xgvela.org/g/xgvela-tsc>
Partners:
<https://github.com/XGVela/XGVela/blob/master/Partners%20interested%20%20in%20XGVela.pdf>
Current TSC: ZTE, CMCC, Nokia, Intel, Ericsson, Huawei, Wind River



XGVela

Project definition

An open source cloud native PaaS for applications and telco network functions, which is to enable new services and help mobile operators to seize the business opportunity from vertical industries in the 5G era

Europe

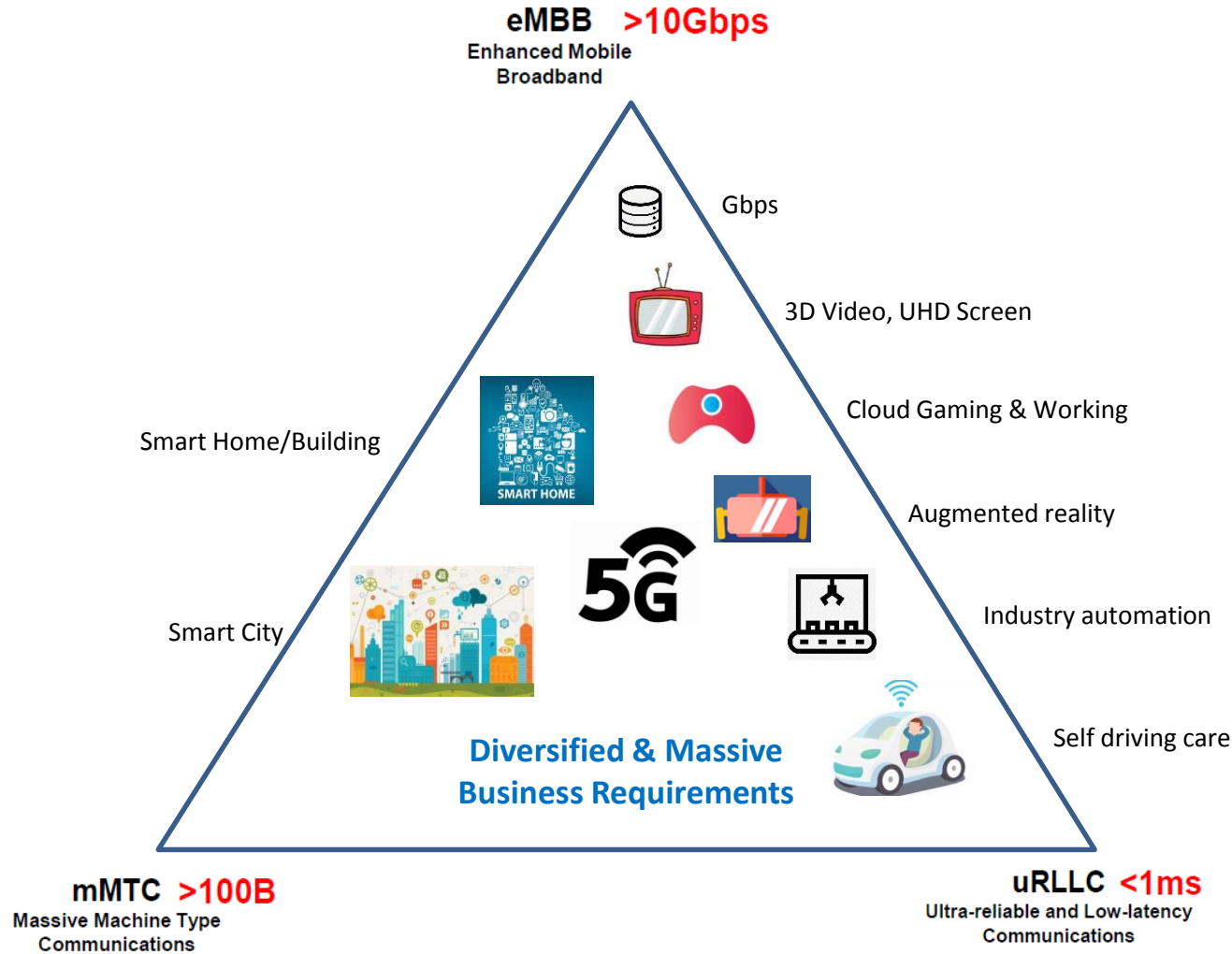


- Container platform; care about DevOps capability to support applications and telco network functions online.
- 5GC, prefer container in VMs, commercial test
- Operator Platform Group in GSMA defines Edge Computing capability in first phase

Asia



- Considering container, first implement in 5G core project
- Rakuten communications platform (RCP) to provide cloud native solution
- RCP marketplace to provide network ability to third-party developers and enable new service innovate
- Commercial test on container platform, edge computing PaaS, open mobile capability platform
- Joint research on cloud native platform & PaaS



- Different from B2C market, B2B market is more diverse, lightweight, uncertain.
- How to quickly innovate, create and launch telco services?



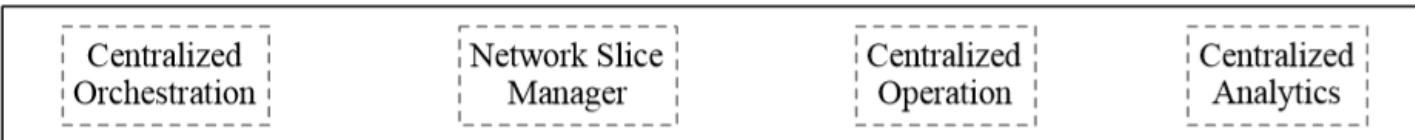
- Cloud native telco PaaS can best serve the difference and uncertainty of 5G use cases.
- Cloud native telco PaaS can help operators to gain cloud capabilities.

Cloud Native Telco PaaS

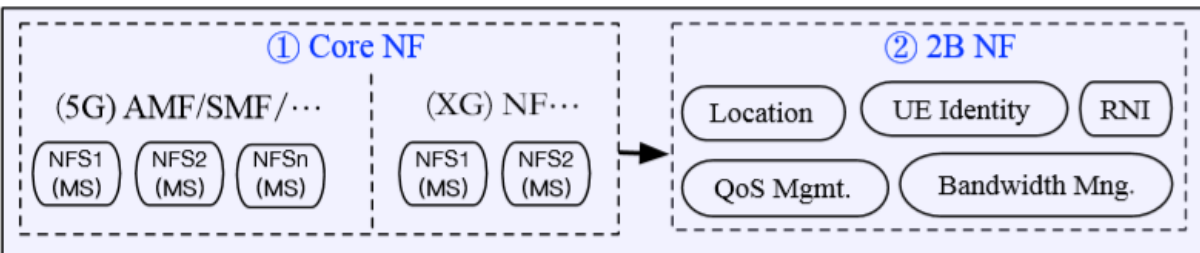
Flexibility

Efficiency

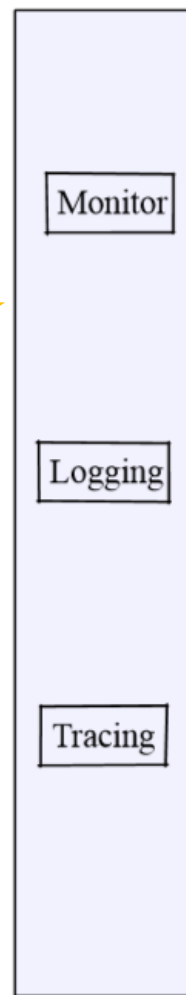
Orchestration & Automation



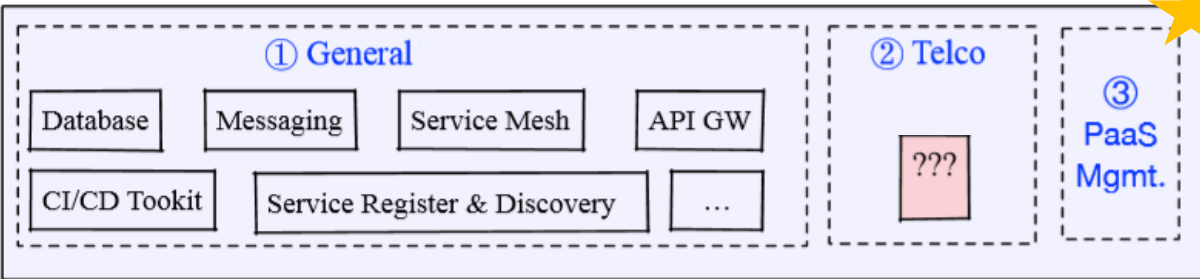
Cloud Native NF



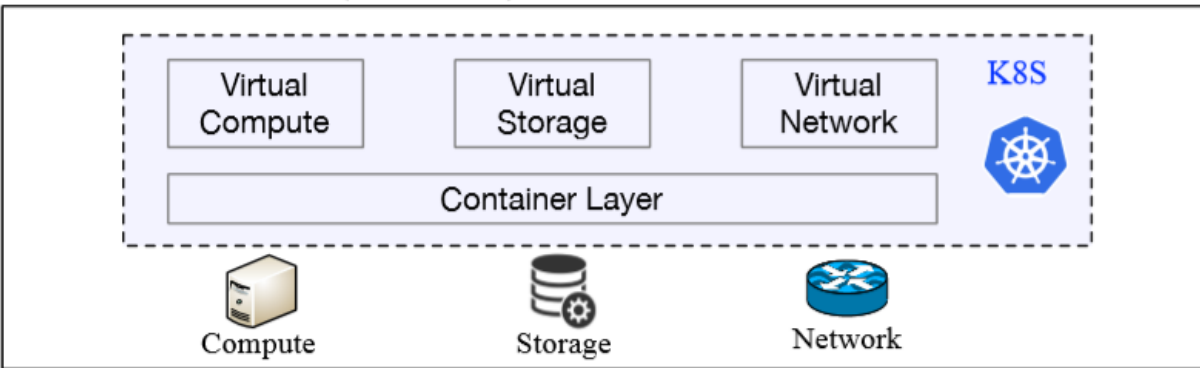
Operation



Telco Platform



Cloud Infrastructures (Containers)



Focus on telco platform

- Define set of functions (PaaS service for reuse across CNFs & applications) needed in telco platform
- Use cases & requirements
- Choose proper software to integrate telco platform
- Development & enhancement of functional components
- Interface: how to provide service to users and applications
- POC

Plan:

- ❑ Initialize a telco platform definition doc & corresponding discussion
- ❑ Use case & requirement gathering
- ❑ Choose a base platform and high priority features to start with

Topics may start around:

General Network functions and Networking related topics

- NAT
- Firewall
- DPI
- Crypto Management
- Load balancers
- Service Mesh
- Secondary interface policy (not covered in Kubernetes)

APIs

- Telemetry and Management
- Monitoring architecture
- APIs to OSS and BSS - Such as Inventory, Trouble ticket information, Alerts and actions taken by platform
- Audit trail

Operational topics

- Hardware Acceleration Exposure
- Customer Resource Definitions and Controllers for Telco operations
- Reporting and remediation

Thank You !

Notes:

For meeting notes