

# 03-28-23 - Deep Dive Meeting - Sprint Planning

## Meeting Recording

## Chat File

### Attendance

Please enter you name and company. Tag yourself using LF ID User Name. Don't have an LF ID yet? Go here: <https://myprofile.lfx.linuxfoundation.org/>.

Name	Company
<a href="#">LJ Illuzzi</a>	Linux Foundation
<a href="#">Ranny Haiby</a>	Linux Foundation
<a href="#">Muddasar Ahmed</a>	MITRE
<a href="#">Robert Edwards</a>	MATRIX Software

### Agenda:

- [Antitrust](#)
- Start Recording- helps facilitate minutes and Action Items
- Welcome 1st Time Attendees
- Review Use Case Proposals
- Sort Use Cases into Sprint Backlogs (3 mo, 6 mo, 9 mo, 12 mo)
- Upcoming Meetings
- Any Other Business

#####

### LF Anti-trust

- We will start by mentioning the project's Antitrust Policy, which you can find linked from the LF and project websites. The policy is important where multiple companies, including potential industry competitors, are participating in meetings. Please review and if you have any questions, please contact your company legal counsel. Members of the LF may contact Andrew Updegrove at the firm Gesmer Updegrove LLP, which provides legal counsel to the LF.
  - [Antitrust Policy](#)

### Start Recording

## Welcome 1st Time Attendees

Welcome all. new attendees. If you have any questions about participating in this community, please contact Louis Illuzzi ([lilluzzi@linuxfoundation.org](mailto:lilluzzi@linuxfoundation.org)).

## 5G Super Blueprint Overview and Getting Started

### Sprint 1 Planning 3 months

Umbrella goal- NaaS - evaluate above as they applies to NaaS, example RAN, Network. NaaS can become a tenant of these services. (not a separate Use Case).

- High Level problem statement:
  - High level User Stories:
- Epic/Use Case- Edge placement of network functions (RAN) deployment at the edge. Create a cell site (leveraging Equinix metro site availability) and place CU/DU workloads at the cell site. for slicing Use Case and cell site deployment (edge placement) Use Case. Also include slicing latency at the network edge. Find the characteristics of the slice, example; maximum number of UEs, maximum number of videos sessions that can be supported; latency at the core and RAN
  - create Epic and User Stories for each; consult with Equinix [Yogendra Pal Muddasar Ahmed Rodney Elder](#) . Schedule followup call
- Use Case- Automation. Equinix has a script to deploy Free5GC and gNodeB. We can look into how that fits into automation and auto deployment for an automation Use Case.
  - Equinix is using gNodeB built into Free5GC
  - How can KubeArmor be integrated into the automated deployment (Muddasar).
- Remote Atestation of IoT devices - SEDIMENT project. Placeholder
- Any others?

### 6/9 Month Sprint Backlog

- Use Case- Secure Orchestration- using Enterprise and corporate policies, and well as standards requirements, demonstrate the capability to deploy workloads securely, and then create network slices based on an SLA. Define behaviors at Day 0 and Day 1. How does KubeArmor fill the security gaps? Create Epic for secure orchestration, then add Use Stories
- Use Case- Overlay networks (Equinix). Demonstrate the mapping of a 5G network slice to where the overlay gateway and controllers are located, and demonstrate how the placement of the UPF or RIC, where the traffic can be broken out to, support the overlay networks. Potential as a User Story in secure orchestration Epic

### Upcoming Meetings:

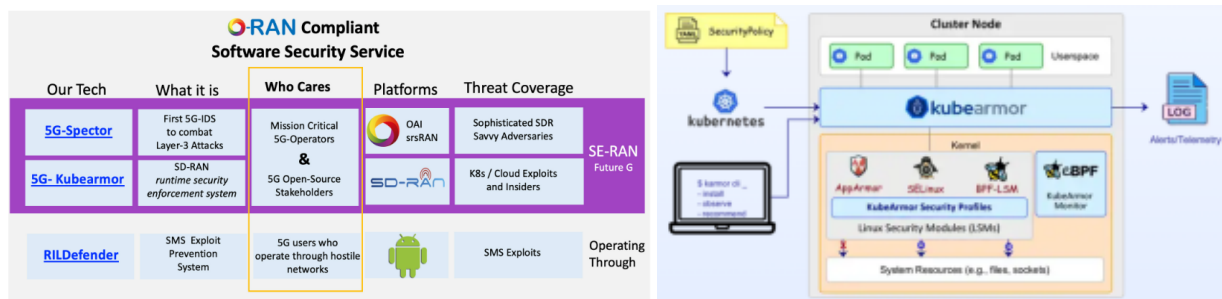
- 04 Apr 2023 Bi-Weekly Status Meeting
- 11 Apr 2023 LJ on holiday the entire week

### Any Other Business

----- Notes from 03/21 Bi-Weekly Status Meeting for Reference -----

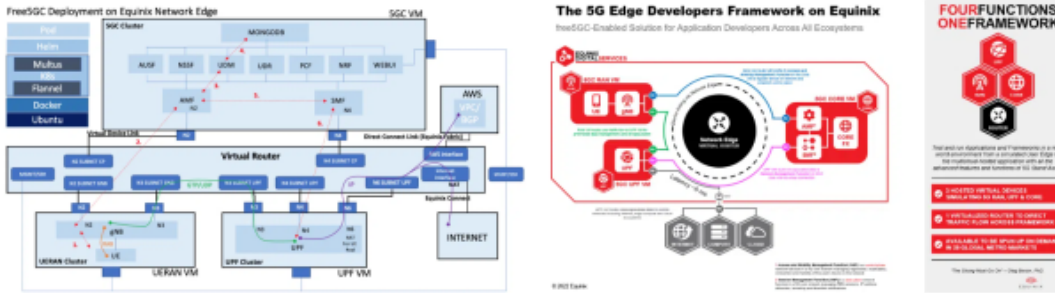
### Accuknox Introduction

- [accuknox.com](https://accuknox.com)
- [Kubearmor](#)
  - Potential 5G SBP Use Cases
    - potential to leverage KubeArmor security for Open Horizon workloads: <https://open-horizon.github.io/docs/kubearmor-integration/docs/README/>
    - KubeArmor- slicing technics and slicing execution to utilize workload network and full stack isolation capabilities
- [5Gsec.com](https://5gsec.com)



### Equinix - Free5GC deployment on Network Edge

- <https://blog.equinix.com/blog/2023/02/23/unlock-the-true-potential-of-5g-with-edge-infrastructure/>



- Infrastructure as a Service, network placement and orchestration as a Service
- Contribution opportunity around observability; Equinix would be interested conversations in insert observability features into the framework
- Equinix is using gnodeb built into Free5GC
- Potential 5G SBP Use Cases
  - Slicing latency at the network edge. Find the characteristics of the slice, example; maximum number of UEs, maximum number of videos sessions that can be supported; latency at the core and RAN
  - Use Case- RAN deployment at the edge. Create a cell site (leveraging Equinix metro site availability) and place CU/DU workloads at the cell site. for slicing Use Case and cell site deployment (edge placement) Use Case.
  - Use Case- Automation. Equinix has a script to deploy Free5GC and gnodeb. We can look into how that fits into automation and auto deployment for an automation Use Case.
    - How are KubeArmor be integrated into the automated deployment (Muddasar).
  - Use Case- Secure Orchestration- using Enterprise and corporate policies, and well as standards requirements, demonstrate the capability to deploy workloads securely, and then create network slices based on an SLA
  - Use Case- Overlay networks. Demonstrate the mapping of a 5G network slice to where the overlay gateway and controllers are located, and demonstrate how the placement of the UPF or RIC, where the traffic can be broken out to, support the overlay networks.
  - Remote Attestation of IoT devices
  - Muddasar summarized the Use Cases at a high level-
    - RAN deployment at the edge
    - Segregated core deployment- core cloud and edge cloud
    - Secure orchestration

## Work Activities Overview

1. Establish/Re-establish permanent 5G Network capability in the labs
  - Must have requirements:
    - a. Core
    - b. RAN
    - c. Automation
    - d. Security orchestration
  - Workplan:
    - a. Define a central Use Case(s)
2. NaaS
  - Must have requirements:
    - LFN and LF Edge projects at the core, cloud, & edge
    - Enterprise Use Case(s)
    - ..
3. Enterprise Use Case

## Lab Updates

- UNH-IOL
  - Will have a gNodeB (Amarisoft) available in March time-frame, that can be shared to the 5GSB. System is already setup in RF isolation chamber. Limited 5G eMBB UE are available as well.
  - LaaS is online / can be booked / connected to the gNodeB.
- Kaloom (Montreal)
  - RU brought into the lab
  - SD-Core installed- Next- connect Kaloom UPF to SD-Core
  - Adding Use Cases with IBM- retail and IoT
  - Open5GS install is pending
- Wavelabs (Hyderabad)
  - EMCO is working with Free5GC

## Upcoming Meetings

- Deep Dive Meeting (placeholder) 28 Mar 2023 Sprint Planning Meeting

- Topic proposal: Use Cases for Next sprint. Identify low hanging fruit. What can we accomplish in the next 3 months, 6 months, 9 months
  - sort Use Cases into LOE buckets; Sprint Backlogs for 3 months, 6 months, 9 months, 12 months
- Next Bi-Weekly Status meeting 04 Apr 2023

## Any Other Business

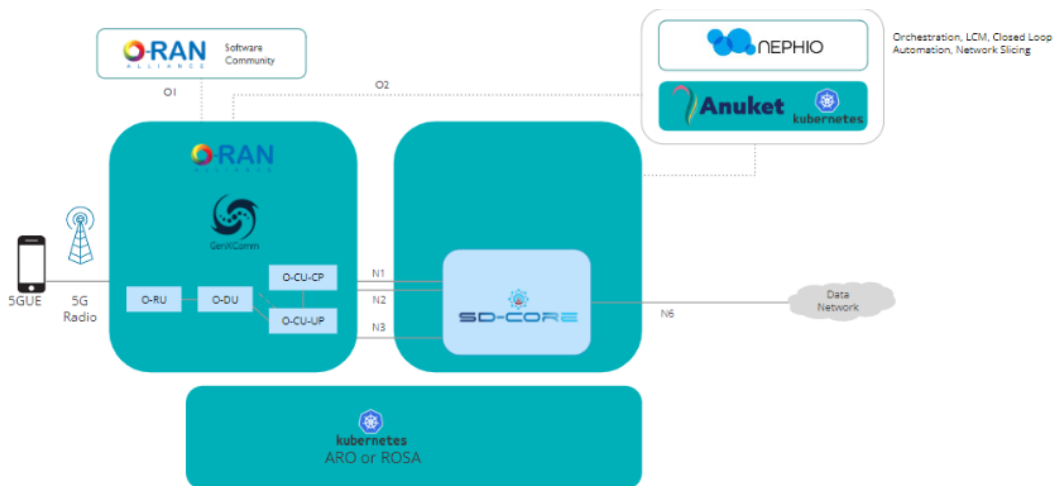
----- Below is Reference and Parking Lot -----

## 5G Network-as-a-Service (NaaS)

- [NaaS eBook](#)
- [5G NaaS Self-Service \(Portal/API/Interface\)](#)

## Nephio

- [2023-02 - 5G SBP: Birds of Feather: Is there value in adding Nephio?](#)
- Thank you to the team from Aarna for bring this proposal to the 5G SBP



- NaaS tie-in
  - IP Transport as a Service. Front haul/backhaul
  - RAN as a service
  - Core as a Service
  - MEC as a Service
- Skills needed:
  - SD-Core
  - RAN
  - Anuket
  - Kubernetes
  - Nephio/EMCO

## IBM Use Cases (in the hopper)

- Potential retail Use Case - MWC has priority
- Weather & Agriculture Use Case with GXC

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## **5G Super Blueprint Workgroups & How to Submit a Blueprint Proposal**