03-21-23 - Bi-Weekly Status Meeting

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
LJ Illuzzi	Linux Foundation
Parthiban Nalliamudali	Wavelabs Technologies Inc.
Muddasar Ahmed	MITRE
Rahul Jadhav	AccuKnox
Yogendra Pal	Aarna Networks
Ankur Kothiwal	AccuKnox
Ganesh Venkatraman	Kaloom
Rajesh Krishnan	Peraton Labs

Agenda:

- Antitrust
- Start Recording- helps facilitate minutes and Action Items
- Welcome 1st Time Attendees
- Accuknox Introduction
- Equinix - Free5GC deployment on Network Edge
- Work Activities - defining a central Use Case for next sprint
- Lab Updates
- 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).

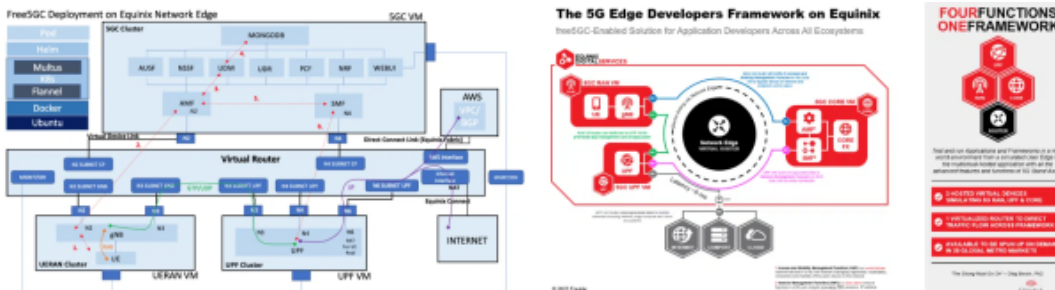5G Super Blueprint Overview and Getting Started

Accuknox Introduction

- 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

Equinix - Free5GC deployment on Network Edge
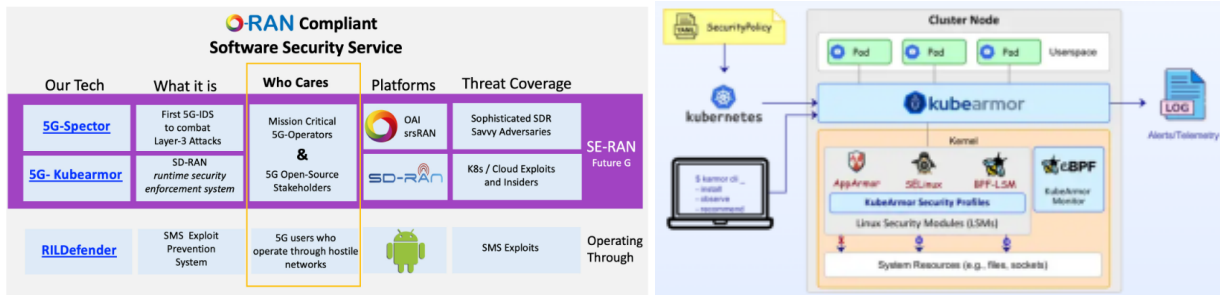
- https://blog.equinix.com/blog/2023/02/23/unlock-the-true-potential-of-5g-with-edge-infrastructure/

- Infrastructure as a Service, network placement and orchrestration 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 characteristcs 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, demostrate the capability to deploy workloads securely, and then create network slices based on an SLA
  - Use Case- Overlay networks. Demonstarte 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.
  - 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 permanet 5G Network capability in the labs
   - Must have requirments:
     a. Core
     b. RAN
     c. Automation
     d. Security orchestration
   - Workplan:
     a. Define a central Use Case(s)
2. NaaS
   - Must have requirments:
     - 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
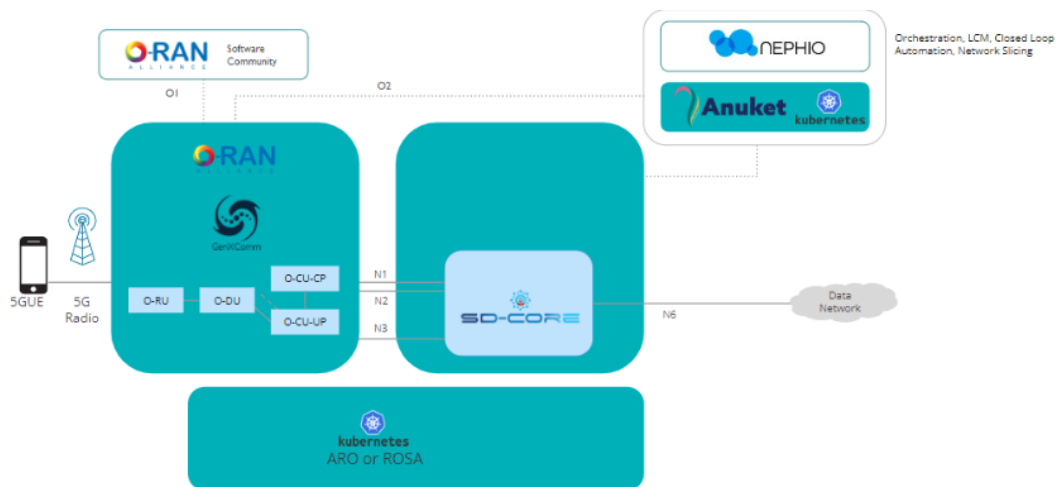- Next Bi-Weekly Status meeting 04 Apr 2023

Any Other Business

---------- *Below is Reference* --------------

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