08-02-22 - 5G SBP Off-Week Working Group 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
Ganesh Venkatraman	Kaloom
Satish Verma	Spirent
Kenny Paul	Linux Foundation
Ranny Haiby	Linux Foundation
Yogendra Pal	Aarna Networks
victanand KS	HCL Technologies
Gervais-Martial Ngueko	AT&T
Satish Sadagopan	IBM
Pano Xinos	Linux Foundation
Parthiban Nalliamudali	Wavelabs
Robert Edwards	MATRIXX Software
Haseem Ahmed	Kratos
Prajith Paran	DU Telecom Dubai

Agenda:

- Start Recording- helps facilitate minutes and Action Items
- Antitrust
- Follow-up on RAN Overview from 07/26
- Test Bed (AT&T)
- Action Items
- 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.

Start Recording

RAN Overview - GXC from 07/26

- · Hardik Jain from GXC provided an overview of ORAN. Slides to follow.
 - Facts & Highlights-
 - Tested up to 1 gigabit per second. Speed is dependent on the UE being used and can go higher
 - Not yet optimized for latency. Current set achieves sub 10 millisecond latency.
 - Current setup can support 3 O-RU per 1 DU. This is increasing with each release.
 - Currently integrated with Magma 5G core
- · Open questions-
 - What is the processing delay at DU and CU
 - What Use Cases can be shown?
 - What components are needed and what components may be missing to build a demonstrable PoC.
 - What configuration interface does GXC support? ORAN interfaces or proprietry?
- Proposed Use Case (Paul/American Tower)- would be interested in a combination of public and private cloud (hybrid network) with the private side used for IoT, robotics, etc. and the public side connectivty that can handle private sliced network use cases like Ultra-Reliable Low Latency Communications (URLLC), but at the same time allowing us to enable wireless service providers to also partake of the network. In a perfect world, we should be able to publish Public Land Mobile Network (PLMN) IDs for the private network, each one with its own set of capacity and latency requirements, but also set aside capacity for wireless service providers traditional use cases.
- Proposal (Yogen)- Orchestration of CNF version of O-CU/DU of GXC in lab using ONAP
- Proposal (Yogen)- Day 0/N configuration of O1 and M-plane configuration for O-CU/DU and RU using ONAP/SDNR(UI/Restconf)
- Proposal (Yogen)- Exercising RAN Slicing support for eMBB
- · Proposal (Yogen)- Control loop exercise using performance measurement data Rx from RAN elements.
- Next Steps-
 - Building Blocks/Proof Points:
 - Deployment through Anuket and Kubernetes to instantiate CU/DU functions (Muddasar)
 - Day 1 configuration/alignment of CU/DU
 - What configuration interface does GXC support?
 - Proof Point 1- Deployment of K8 workloads without any function (Muddasar)
 - Proof Point 2 -Deployment of workload specific to the core and specific to RAN (Muddasar)
 - Proof Point 3 -Can workloads be configured? (Muddasar)
 - Proof Point desired outcomes: (Muddasar)
 - 5G Core is deployed and configured
 - RAN is deployed and configured
 - UE simulator can joint the network and access the services (SMS, voice, data)
- Labs:

Kaloom (Montreal) - CU/DU being setup in Kaloom (Ganesh). workplan? Goal- end to end slicing core to RAN. Architecture diagram? UNH

Wavelabs (India)

Equinix (Dallas)

Aarna

• Test Bed based on 5G SBP: ORAN SMO Package - Combining multiple open sources into an E2E package

Off-Week Deep Dive Meeting-

Next Meeting Aug 16 - call for topics

Potential Topics:

- Lab Resources Utilization- Kaloom/UNH/Wavelabs (India)
- Radio- GenXcomm/UNH/Wavelabs- radio HW requirements, Wavelabs India lab setup.
- · ORAN -Service Management Orchestration (SMO) Framework- demo to show capabilities, and plan out next steps for 5G SBP
- ORAN-SC implementation in the lab- what is available today? What is on the horizon?
- Integrations:
 - GenXcomm with ONAP (ONAP working as a SMO)
 - GenXcomm with Magma
 - GenXcomm with Anuket

Action Items (open)	
	Ranny Haiby Need decision on core (November & Longer term)
~	Ganesh Venkatraman Status at each lab
~	Ganesh Venkatraman Next Steps
	Kader Khan, Parthiban Nalliamudali, Benjamin Posthuma begin work setting up radio components in Wavelabs lab. Can radio be shipped to Wavelabs in Hyderbad? GXC-radios working with Magma. Testing of all Magma 5G capabiliites underway. Other radio vendor DMW
	Tracy Van Brakle extend invitation to other operator members of ORAN (i.e. Verizon)
	Heather Kirksey Reach out to outreach committee on Magma Slack #magma-outreach-committee to discuss joint marketing opportunities.
	Tracy Van Brakle Any link to Multi-Operator RAN from Dec 2021? Referenced on a previous call.
	Alex Stancu Can help with ORAN implementation. Martin- what is the success criteria? Agenda item for Deep Dive meeting?
	Martin Skorupskican add detail and next steps for SMO Framework. https://wiki.o-ran-sc.org/x/-YvYAg
~	LJ Illuzzi Visibility on the Demo document

Any Other Business

******* Parking Lot ********

Lab Architecture:

- 1st Draft: https://docs.google.com/presentation/d/12Bs-RoH-yKvKTrHocDK57LiHIGvTT3tQKFR10xetSpg/edit#slide=id.g1295cdd58af_0_0
- Updates from 10 May 2022 5G SBP Deep Dive meeting
- How do we add Wavelabs lab into the architecture?
- Request that the RNA and core details be specified on the google doc.

Lab Resources

- UNH- Faraday cage in place.
- Kaloom (Montreal) Hanen, GenXcomm radio is currently at Kaloom lab. Hanen will talk with Ganesh. (Kaloom previously ran the UPF and fabric). Faraday cage in place
 - Missing radio parts- SW for RAN. If GenXcomm has this, then much easier to deploy
- · Wavelabs (India)-

Action Items (completed)

- ☑ LJ Illuzzi- SMO Framework packages. What ONAP group is involved? https://wiki.onap.org/x/DgmsBw
- LJ Illuzzi Create wiki to look at the various use cases among communities.
- ✓ Martin Skorupski start putting together use cases among open source communities. Starting point --> ORAN Alignment
- Amar Kapadia Will update wiki on roadmap
- ✓ LJ IlluzziRoadmap refresh
- Kader Khan Suresh Krishnan Create requirements document capturing ONAP requirements for Magma (as discussed on 03/08). Requirements doc created
- Hardik Jain dedicated resource from GenXcomm to work 5G SBP. Ben will help with resource. Rajesh Ramesh is named resource.

Any Other Business

22 Feb 2022 ONAP/Magma Integration - Service Assurance - KPI Network Slicing. This is being tracked by ONAP for Enterprise Task Force. Will
come into play in the 5G SBP down the line.