Meeting 04-05-22 - 5G SBP Regular 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		
Brandon Wick	Linux Foundation		
Ganesh Venkatraman	Kaloom		
Martin Skorupski	highstreet technologies		
Satish Verma	Spirent		
Amar Kapadia	Aarna Networks		
Yogendra Pal	Aarna Networks		
Bob Monkman	Intel		
Robert Edwards	MATRIXX Software		
Ali Tizghadam	TELUS		
John McInerney	NIWC Pac		

Agenda:

- Start Recording- helps facilitate minutes and Action Items
- Antitrust
- Welcome 1st Time Attendees
- Meeting time changed back to 1500 UTC
- Invitation to Collaborate on the Agenda and Discussion Topics
- Marketing Update
- 5G Cloud Native Demo Documentation Update
- Roadmap
- Architecture & Adjacent Communities
- Workstream Updates
- Lab Resources
- Action Items
- Off-Week Deep Dive Meeting- who's up for April 12?
- 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

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

Invitation

• In an effort to get even more community input on the agenda and the discussion topics we are using the groups.io mailing list to send an invitation to contribute to the meeting agenda. The invitations are set to go on the Monday prior to each bi-weekly meeting.

Marketing Update

LFN Events:

- April 12-14: Open Networking & Edge Executive Forum
 - O Complimentary event. Speakers/Schedule now live!
 - Register Here
 - 5G SBP Update Slides (under development).
- June 13-16: LFN Developer & Testing Forum. Porto, Portugal.
 - O Register Here.
 - Call for event coordinators for the 5G Super Blueprint.
 - status, working sessions, interactive
- Nov 15-16: ONE Summit, Seattle, WA
 - o Save the Date. Registration coming soon.
- Nov 17-18: LFN Developer & Testing Forum, Seattle WA
 - O Save the Date. Registration coming soon.

LFN Badging Program:

- "LF Networking 5G Super Blueprint" Badges being awarded to all 40 contributors to last version of the 5G SBP Demo last fall.
- Will be following up with some of you for some team member email addresses.

LFN Landscape:

- LFN Landscape recently Published
- 5G Super Blueprint Tab under development
 - Includes participating projects and companies

LFN Website:

- New LFN Website Under Development (launching early April)
- 5G Super Blueprint prominently featured.

5G Cloud Native Demo Documentation Update

- · Document as you build, document as you code
- · Community participation & input is key to success
- Wavelabs offered that developers can send any notes, sketches, diagrams to them when available to assist with documentation.
- Documentation Repo: https://github.com/5G-Super-Blue-Print/5G-Cloud-Native-Demo-Documentation-2021. Thank you Wavelabs Team!
- Readout & Update from Wavelabs
- Reference:
 - o 2020 Documentation Link: How to Set Up the 5G Cloud Native Network Demo reference EMCO information on this page

Roadmap - updated 5G SBP Phases

- 29 Mar 2022 Off-Week deep dive meeting focus was on Road discussion: https://wiki.lfnetworking.org/x/iZ8ZB
- 22 Mar 2022 Roadmap refresh presented by Amar
 - 5G Super Blueprint Roadmap
 - Magma 1.7 release pending. Testing underway
 - Targeting early Q2 for Phase 1.
 - Phase 1- in addition Anuket will need to be refreshed.
 - $^{\circ}\;$ Phase 2- key addition is to implement GenXcomm integrations:

- GenXcomm with ONAP (ONAP working as a SMO)
- GenXcomm with Magma
- GenXcomm with Anuket
- o Phase 2 stretch goal- ONAP configuration management of 5G core and/or ORAN

Architecture and Adjacent Communities

- Request for a 5G Super Blueprint Requirements & Use Case Advisory Group
 - The need for such a group was confirmed and formally requested during the March DTF
 - Wiki page created: Requirements & Use Case Advisory Group
 - º Role: identify use cases, requirments, architecture, platform component roles and ensure alignment among the participating communities.
 - Discussion Points-
 - Community thoughts on creating this group?
 - Any additional thoughts on the role of the group? Especially from the folks who attended the March DTF.
 - How would we staff this group? one per community (ONAP, Magma, EMCO, Anuket, O-RAN, End Users, etc.)?
 - <u>Call for Action</u>- signup to work on this important Advisory group.
- Proposal to use the off Tueday for working meetings
 - Perhaps we can rotate between Requirements & Use Case Advisory Group, ONAP and EMCO Alignment, ORAN Alignment teams, RAN workstream.
 - <u>Call for Action-</u> Anyone from these teams interested in taking the March 29 slot? Maybe <u>ORAN Alignment</u> per below Next Steps?
- ONAP/EMCO Alignment updates
 - Material from Last weeks DTF:
 - Latest Deck Architecture, Role, Use Cases
 - 2022 LFN Workshop EMCO and ONAP On-boarding and use case alignment
 - Review Role Alignment, Use Cases, Action Items from above as needed
 - Next Steps:
- ORAN Alignment
 - Proposed starting points-
 - Look at O-RAN reference architecture
 - Sort/prioritize use cases
 - O Potential workstreams- (picking up the discussion from 02/22)
 - Plugfest (June 2022) focusing on 5G SBP and Multi-Operator RAN (reference Dec 2021- Multi-Operator RAN- Tracy) Link: https://futurenetworks.ieee.org/conferences/2021-first-responder-and-tactical-networks-workshop
 - o Is there an ORAN (preferably ORAN-SC) implemention available that can be installed? Wavelabs offered to open their lab for this.
- 5G RAN (RU + CU/DU)
 - O Work that can be started now:
 - Coordination between GenXcomm, Wavelabs, UNH.
 - Kader offered to setup lab in India. Would need help setting up radio in India. off week meeting?
 - GenXcomm RAN server requirements.
 - Hardik/GenXcomm to name a dedicated resource to work 5G SBP
 - Ben will check on resource
 - GenXcomm has an ORAN implemenation that we can perhaps leverage.
 - ORAN-SC implementation Alex Stancu can help
 - Yogen asked about recommended model. Tracy recommends a hybrid model over higherarcial model
- Monthly Magma call- "Magma 5G- Everything you need to know".
 - Logistics- 2nd Friday of every month
 - 8am PT/11am ET/ 1500 UTC
 - Zoom: https://zoom.us/meeting/register/tJwpfumgrDksG93YBPRW6vmrNVHWR-IVMEsG
 - April 8 meeting has been canceled
 - Joint marketing opportunities Heather
 - ONAP Requirements
 - Magma feature submission: https://github.com/magma/grants/issues => Issues 36, 37 and 38 have been submitted to cover ONAP Requirements
 - Here is the list of requirements to support ONAP/Magma Integration, supported by Neil Hoff (OPS 5G Customer):
 - We want to move forward with our Network slicing use case therefore we would like to know if there is any feedback on the presentation (ONAP/Magma Service Assurance Integration – KPIs) made by Jorge Hernandez-Herrero last year
 - What would be the Magma KPIs to support Network Slicing?
 - During our Integration with Magma, an issue has been identified: Magma K8s resources need to be installed in different namespaces, and therefore be split into separate Helm packages. Is there a delivery date from Magma to deliver it? thanks

Workstreams

- ONAP/Magma Integration #1
 - O 22 Mar 2022 Update from Aarna: The action item is to try workaround in Helm charts on ONAP Istanbul release. We have been facing challenges with ONAP (I release) deployment. On one ONAP deployment on the UNH server where we managed to deploy, the ONAP portal is extremely slow, and takes few minutes to respond. We are trying to install on another server but were unable to allocate new servers due to issues with UNH LaaS setup. These are finally resolved, and we are able to allocate a new server on which we will restart ONAP deployment, and then the workaround to deploy Magma with modified Helm charts.
 - o 8 Mar 2022 CBA and Helm repos. Louis/Yogen need to unstick check-in issue.
 - o 22 Feb 2022 Ran out of time for update
 - O8 Feb 2022 Yogendra: Working on a Helm chart issue by splitting them up. Access gateway. Small infra changes. We'll them be taking up the Magma orchestrator. Is there any specific help from Magma needed (Suresh)? Yes, that would be a great help (orchestrator charts). Suresh and Yogendra to synch offline. Helm chart fixes will require namespace changes (the ideal path). There is also a workaround to force all namespaces to be the same. The community agrees this is not the ideal long-term solution. It was requested that the Magma community, led by Suresh (Wavelabs) work with Yogen to package the Helm charts with namespace corrections as the long-term solution. Suresh to consult with Magma community if this will lead to any conflicts with Magma namespace as it exists today.

- ONAP/Magma Topic: #2
 - o 22 Mar 2022 Kader have servers and simulators. Waiting on 5G radio.
 - o 08 Mar 2022
 - o 22 Feb 2022 Ran out of time for update
 - o 08 Feb 2022 Wavelabs + Rebaca making good progress (in Wavelabs lab) on integration. Before Magma 1.7 come out, we'd like to replicate this in the community labs (by cloning). If using Wavelabs for community use, need to address some issues (e.g. jumphost set up as a trusted host). Can a jumphost be set up at Kaloom and/or UNH? Hanen/Suresh/Amar looking into it. Option may be to connect the labs. Reference- UNH lab is used for 5G resources (Amar).
- Magma namespace changes- Namespace changes needed in Magma to resolve Helm chart issue (permanent fix)- Wavelabs/Suresh
- ONAP/ORAN -SMO Framework workstream (Service Management Orchestration)
 - Martin- weekly meeting in place on SMO Framework packages. What ONAP group is involved? https://wiki.onap.org/x/DgmsBw
 - Tracy- proposal to show SMO Framework demo to show capabilities Off-week call?
 - Automated deployment and testing using SMO package and ONAP Python SDK DRAFT -demo recording ar bottom of page
 - Tracy- SMOs for gNB, etc
- ORAN/Anuket workstream
- 5G RAN:
 - o 22 Feb 2022 What workstreams can begin now that GenXcomm is onboard?
 - o 08 Feb 2022 Need to check in with GennXcom and determine RAN side of 5G SBP (CU/DU). Catherine suggestion: Bring this to the ORAN-SC community (Tracy + Martin). LF Staff to make connection.

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 (open)

	Kader Khan@GenXcomm begin work setting up radio components in Wavelabs lab				
~	LJ IlluzziRoadmap refresh				
	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				
	Kader Khan Suresh Krishnan Create requirements document capturing ONAP requirtements for Magma (as discussed on 03/08)				
	Hardik Jain dedicated resource from GenXcomm to work 5G SBP. Ben will help with resource. Rajesh Ramesh is named resource.				
	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 Skorupskican add detail and next steps for SMO Framework				
tion Items (completed)					
~	LJ Illuzzi- SMO Framework packages. What ONAP group is involved? https://wiki.onap.org/x/DgmsBw				

Act

- 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

Off-Week Deep Dive Meeting- who's up for April 12?

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?
- Phase 2- integrations:
 - GenXcomm with ONAP (ONAP working as a SMO)
 - GenXcomm with Magma
 - GenXcomm with Anuket

******	Parking I	Ωt	******

• 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.