

Meeting 111621 - 5G SBP

Attendance

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

LJ Illuzzi	LFN
Brandon Wick	LFN
Casey Cain	LFN
Heather Kirksey	LFN
John Mann	SEMPRE
Yogendra Pal	Aarna Networks
Neil Hoff	NIWC Pacific
Parthiban Nalliamudali	Wavelabs
Duy Hoang	HCL
Kader Khan	Wavelabs
Sriram Rupanagunta	Aarna Networks
Eric Tice	Wipro

Proposed Agenda:

- Start Recording- helps facilitate minutes and Action Items
- [Antitrust](#)
- Welcome 1st Time Attendees
- ONE Summit Demo/Keynote/Booth Recap
- LFN Developer and Testing Forum, January 10-13, 2022 (virtual event)
- Architecture
- Workplan
- Adjacent Communities Integration
- New Bridge: Invite and New Zoom bridge starting 11/30
- AOB

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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).

ONE Summit Demo/Keynote/Booth Recap (Brandon / Heather)

- Thanks again for your participation!
- Reminder: Please help us promote the Marketing Assets:
 - NEW: 5G Super Blueprint Snackable: Link: [LFN 5G Super Blueprint Image.jpg](#)
 - NEW: 5G Super Blueprint Keynote Video from ONE Summit: (--<https://youtu.be/7j2EMuF26Ik?t=768>--)) Demo starts at 12:48
 - Booth Video 1: 5G Super Blueprint: A Behind the Scenes Look (Hanan) (--<https://www.youtube.com/watch?v=YF5mTRE1wDs>--)) 580+ Views
 - Booth Video 2: ONE Summit 2021 Cloud Native 5G Blueprint Network Slicing Demo (Amar) (--<https://www.youtube.com/watch?v=CIEmb0jGa7A>--)) 390+ Views
 - Keynote Slides Available to all. Please use in your promotions to describe your work and participation in the 5G Super Blueprint:
 - Google Slides: <https://docs.google.com/presentation/d/17w5hZyjcW761Yb4fWQTu8RYupR27mIRC/edit?usp=sharing&ouid=110962935712069099662&rtf=true&sd=true>
 - PDF: [ONE Summit 5GSP Keynote Demo Slides.pdf](#)
 - 5G Super Blueprint a key part of 2022 LFN Marketing Plan (LFN Landscape, Website, and Campaigns) as a key industry collaboration and integration effort.
- Documentation: LFN Team developing an SOW to seek contractor. **Community participation/input will be key.**

LFN Developer and Testing Forum, January 10-13, 2022 (virtual event)

- Topic submitted (thank you Srini)- [5G SBP: Realizing multiple network slices & MEC Apps in each slice with LFN/LFE/CNCF projects](#)
- Can we demo Orchestration of Magma CNFs using ONAP?
 - Extend invite to Magma to collaborate
- What other topics can we consider?
- Volunteers for event lead and event committee?

Architecture - (Amar/Heather)

- ONAP Honolulu vs Istanbul. Current testing with Honolulu. Continue with Honolulu, then move to Istanbul
- Use Case: Private LTE Network security. Need Magma and ONAP SMEs
 - Kader/Wavelabs can help with secure aspects with slicing and private mobile network. Setup separate call. Include Neil Huff. Setup separate call. Need R&D from Magma.
- 2 flows: EMCO under ONAP and EMCO standalone
- Anuket as cloud infrastructure
- Rebaca interop testing / synch with Wavelabs (Kader/Samir)
 - Show Magma/ABot testing on 11/30
 - End to end slicing- pickup where it was left off on 5G demo. Issue with Kaloom lab firewall may be key issue. Jamie, Constanten, Jason, Samir. Samir to update on Nov 30.
- Physical radio integration: Is the RAN ready for testing on GenXcom. Cap Gemini/Intel to confirm (Sam/Utkash).
- Consider other RAN vendors

Workplan - (Louis/Amar)

- ONAP/Magma
 - Honolulu up and running. Helm chart issues discovered, suggesting remediation (Yogendra from Aarna to address).
 - Target completion by 11/26
- Rebaca/Magma: TBD.
- Document as you build
- Do we need separate call for 5GSPB phase Next for execution? (similar to weekly 5G Cloud Native Network demo)

Adjacent Communities 5G Super Blueprint Integration (All)

- L3AF: Louis inviting L3AF Stakeholders to the 5G Super Blueprint (Amar/Louis)
 - Security (eBPFs enhancements in data path)
 - Walmart testing of 5G Super Blueprint
 - Talk to Anuket around eBPF reference
- ONAP + Magma (orchestrate Magma CNFs using ONAP)
 - 02 Nov 2021
 - Aarna moving to ONAP Honolulu for this work.
 - ONAP Istanbul is due out on Nov 4. This release brings improvements for deployment and day2 of more complex CNFs. What is the LOE to move from Honolulu to Istanbul? Or wait for Istanbul?
 - 21 Sep 2021 - Pending Seshu meeting.
 - ONAP+Magma integration- issue at TOSCA packaging level. ONAP community to assist in debugging TOSCA issues, starting 08/25. Helms charts working
 - Enterprise Task Force (Amar, Prabhjot, Siraram, Catherine, Kader, Phil)
 - Meeting Details Here: <https://wiki.onap.org/display/DW/TSC+Task+Force%3A+ONAP+for+Enterprise+Business>
 - Align with ONAP + Magma Milestones / Timeline
 - Onboard Magma Controller (gateway) with ONAP (currently as VNF)
 - Network Slicing. Reminder: Monthly meeting on how to align with other communities, address pain points. Next meeting: Friday, Aug 13, 10-11 AM CST time. Details in Magma community calendar: https://calendar.google.com/calendar/u/0/embed?src=c_gbiu1t7a67ika1th2smldeh19s@group.calendar.google.com&ctz=America/Chicago
 - Networking Slicing Meeting last week including security efforts, breaking out into a separate meeting series. Working toward service assurance kickoff based on Magma capability. Meeting Details Here: TBD
- LF Edge (Amar, Ike, Joe)
 - 09/07 Heather- Use case discussion with TSC upcoming in September. Ike can also provide insights.
 - Goal: Private network slide to integrate with IoT use cases (eventually). Which projects involved, which integrations needed with other projects, etc. Volunteers welcome to contribute, join discussion on the TSC.
 - 9/7: Modeling 5G Super Blueprints roughly on Akraio blueprints template (5G integration work ongoing). Ike to provide links.

- Any other LF Edge integration at this time?
 - 9/7: EdgeX (tomorrow a presentation with customer example), Open Horizon?
 - Fledge, EVE (Energy use case)
 - IoT/EdgeX possibilities. Ike: Suggest contacting Jim White, EdgeX TSC Chair. Brandon to follow up. Akraino has more than 20 blueprints across many areas including 5G integration. (insights on 5G Core). Brandon to follow up Energy/EVE/Fledge Communities.
 - Prabhjot: PCI blueprint could be a value add in terms of service assurance (includes ONAP/EMCO), MANO, cloud provider integration. Good documentation coming soon. Oleg/Tina, TSC Chair (Akraino).
- Anuket (Amar, Heather)
 - 9/21: We have just deployed ONAP on Anuket at UNH! Congrats to the team. Docs to follow.
 - Anuket (Heather)- deployment- 2 servers at UHN. ONAP on 1, orchestrate MAGMA on other.
 - Kali Release RI2 on UNH Servers, deploying the Magma Core
 - 2 instances of Kuberef (1 per server) being installed. We will use one to host ONAP and one to deploy Magma Core onto. Confirming support for Kubevirt/Virtlet, we need this since one of the Magma functions is still a VM.
 - Status: Servers are up and we have asked the Kuberef team to install pending instructions from Sriram on how to access the servers.
- ORAN Alliance / ORAN SC (Trishan)
 - What is the time frame where ORAN might participate in 5G SBP?
- Other? Feel free to add here.
- Heather: Integrated CI/CD (down the road).
- Ike: M2M standards + ETSI use cases. Ike to share more information, working with companies in this space.

New Bridge: Invite and New Zoom bridge starting 11/30

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

9/21: Several Demos from the community are coming in as part of the LF Pavilion at ONE Summit (LF Edge, Magma, ORAN, others). Brandon will add in the details to track these efforts as it relates to the Blueprint.

5G SBP Milestones, Timelines, Infra (Louis)

- Reminders:
 - Document as you go
 - [Rules of the Road](#)
- Update: [Integrations Status: Phase 1](#)
- Update: LFN Demo Infra
- Repository: <https://github.com/5G-Super-Blue-Print>.

5G SBP Future Labs

Conversations going with CENGN. Other community resources welcome.

5G SBP Workstreams

Get Involved! Find an area where you can contribute.

- Diagrams
- Build Documentation- video and print
- Rules of the Road
- LFN TAC Whitepaper
- ONAP Enterprise Working Group Alignment + Integration (Prabhjot)
- LFN Project alignment work (Anuket, ODIM, ONAP, etc.)
- Mapping Features & Dependencies
- ONES Demo support
- Keeping an eye open for new ways of delivering service (new innovation from practice rather than theory). Working models could help standardize the industry. (Sudhir Iyer)
- Legal: Heather in discussions with LF legal team on license types.
- Projects Integration
 - Align with ONAP Enterprise WG Concepts
 - Code will be be upstreamed wherever possible.
 - 2 Types of Artifacts: 1). Contributions to upstream code. 2.) Non-code elements, etc.
 - Legal: Heather in discussions with LF legal team on license types.
- Magma demo integration post ONES
- Leveraging 5G Cloud Native Network Demo (Proof of Concept) 2021
- 5G Super Blueprint Criteria
 - Open source components where available
 - Proprietary components where Open Source component does not exist or is not compatible
 - LFN TAC Consult

- Blueprint Outputs (scrips, docs, mode/Yaml/Yang files). Do it in stages.
 - Establish forcing function
 - Consider leveraging Akraino best practices
- Establish upstreaming process
- 5G Super Blue Print Playbooks
- Establish joint/cross project repos
 - Separate demo and 5G Super BP Jiras
 - Jira cross tagging- need IT discussion