

Meeting 092121 - 5G SBP

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/>.

LJ Illuzzi	LFN
Ganesh Venkatraman	Kaloom
Casey Cain	LFN
Heather Kirksey	LFN
Brandon Wick	LFN
Ali Tizghadam	Telus
Kader Khan	Wavelabs
Amy Zwarico	AT&T
Bob Monkman	Intel
Christopher Adigun	
Parthiban Nalliamudali	Wavelabs
Daniel Nilsson	
Mansoor Khan	
Phillip Ritter	
Ranny Haiby	
Sriram Rupanagunta	
Timo Perala	
Gervais-Martial Ngueko	AT&T

Proposed Agenda:

- Start Recording- helps facilitate minutes and Action Items
- [Antitrust](#)
- Welcome 1st Time Attendees
- 5G Cloud Native Network Demo Update
- ONE Summit Update
- Workplan
- Adjacent Communities Integration
- 5G Super Blueprint Use Case Discussion
- 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 Updegrave at the firm Gesmer Updegrave 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 effort, please send to Brandon Wick (bwick@linuxfoundation.org), Louis Illuzzi (lilluzzi@linuxfoundation.org), and hkirksey@linuxfoundation.org.

New participant information.

5G Cloud Native Network Demo Update (Louis/Brandon/Amar)

- Next Iteration to be shown at ONE Summit, Los Angles, Oct 11-12

- Call Time, Weekly, Tuesdays & Thursdays 7:00 AM PT
- Bridge Info and call notes [added here](#).
- lfn-demo.slack.com
- Plan A + Plan B options. Decision pending. Configurations being documented and shared with the community. Ike to share some information here for consideration.

Marketing Update (Brandon)

- ONE Summit Demo Planning Underway
 1. SG SBP Feature as part of opening keynote on Oct 11 (7 minutes, set up + video snapshot of slicing + dashboards, closing)
 2. LFN Kiosk in LF Both Pavilion (5 minutes, same slicing snapshot), different slides, different talking points)
 3. Behind the Scenes Lab Video (how the network is set up in Montreal, fun, personable)
 4. LFN Demo Webinar (November TBD).
- LFN Website
 - Updating the [5G SBP page](#) + Adding a new Collaboration space
 - Goal: Make more of a destination/portal/collaboration space (in stages)
- Launch Assets:
 - Press Release Mention
 - Videos
 - Website Updates
 - How To Guide (under development)

Slides- DPDK added to Phase 1

Videos Required (Initial)

1 clip of degraded video on Slice A (30 seconds)

1 clip of clear video on Slice B (30 seconds)

1 clip of Rebaca dashboard showing telemetry data for Slice A (30 seconds)

1 clip of Rebaca dashboard showing telemetry data for Slice B (30 seconds)

Notes:

- LFN will provide the video clip to run through each slice.
- The slicing clips needs to be the same video.
- Demo team will be responsible for screen capture.
- We will match up the timing and split screen display with editing
- We need the 4 screen capture demo videos by **9/27**.

Note: We've added the DPDK logo to the slide phase diagrams (linkedin in the left hand column)

[Workplan](#) - Louis/Amar lead

Reminder on Documentation- send config steps, log info, links, screen shots, etc to lilluzzi@linuxfoundation.org. No need to format. It will be sorted, formatted, and placed on the wiki.

09/21:

- Guidance on 5G standalone testing/timeline (Wavelabs & Phil)
- Magma Integration Update: This has not happened yet. The point person on this, Seshu has been sick. Sriram to synch with Lucasz to see about coverage.
- Anuket Instal?
- ONAP Instal?
 - Sriram: Needs 3-4 Days to get this into a presentable format.
- GennXcom: Documentation needed. Louis to follow up with Hardik.
- Rebaca: Documentation needed. Louis to follow up with Samir.
- Kader Khan: Wavelabs working with Rebaca to to get this going (testing Magma with Abot).

09/07: Servers: Sufficient for the next 12 months

ONAP Honolulu installed.

Anuket successfully installed on one server (ONAP + Anuket integration complete)

RI2 Team in Anuket (Asking Rehab what's the plan): Showing Magma on Anuket infrastructure.

New Row: Working in Parallel: We can set up on 2nd server, GennXcom could do non-stand-alone NSA 5G testing on this server.

Rebaca: Amar/Louis to ask the Rebaca team to continue the work here (installing Abot + test Magma using Abot – connecting Magma to a 5G radio and emulator) (once Rebaca's work is done with the current demo set up/configuration)

Magma/WaveLabs: We can start with 4G, then move into 5G SA. Phil to check with the team on timing of this.

EdgeCloud Pending

Onboard Magma Orchestrator: Prabhjot syncing with Seshu

No other updates on remaining items.

5G Super Blueprint Use Case Discussion (Heather) - [5G Super Blue Print Use Case Page](#)

Terminology. We've been speaking in [phases](#) for the Super Blueprint Initiative, but we should also think about versions, e.g. "Super Blueprints" that cover different areas, e.g. SBP for Energy use case. No one from Energy was on the call today, need to follow up with them offline.

Key item from last call: **Define/build a minimum viable product (MVP) across community** (starting with Magma + ONAP, including slicing) in an incremental/iterative approach (working up to things like service assurance, secure network slice mechanism, non-functional reqs, throughput, latency, and other performance reqs). We can start building this around our first use case: [5G with Private LTE](#) here.

Heather provided an update showing an initial draft working page outline for 5G with Private LTE Page linked above.

- Current Work in progress
- 5G with Private Mobile Networking (5GSP Phase 1)
- Private Mobile Network that enables Edge/IoT
- Integrated CI/CD (parallel effort)

Prabhjot: Timelines for MVP? Build out 4 bullets by EOY? We need to look at what we're going to deliver. E.g. Magma/ONAP teams working on it. Ike: 3GPP and GSMA definitions define services for call flows. This can help ONAP/Magma to build to this. Sudhir: Suggestion: Take this in levels that get defined, e.g. Define 4 use cases, starting at Level 0, then working our way up to level 4 (with details). Vision for MVP should not be latency and throughput. Heather: Getting a 5G networking functioning with an open source core achieving a network slice. We're trying to determine how much work can be defined here. Prabhjot: We are getting close to functional Magma with ONAP workflow. Perhaps a few weeks away with a fully functional instance. Heather: 4 weeks from now, let's check back in on status and blockers. Use this call to marshal resources on specific challenges/opportunities.

Adjacent Communities 5G Super Blueprint Integration (All)

- ONAP + Magma
 - **[09/21] - 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 Akraino 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)
 - Phase 3 Integration
- 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.

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

Questions from Last Time

- DevOps Pipeline Implementation and where we are. Willing to jump in and help out (Fahad, Solutions by STC)
- 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)

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Parking Lot:

- 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