

LFN MAC Meeting

September 13, 2023

 **LF** NETWORKING

 **THE LINUX** FOUNDATION

Antitrust Compliance Notice

- › Meetings of the LF Networking Fund involve participation by industry competitors, and it is the intention of the Project to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of and not participate in any activities that are prohibited under applicable U.S. state, federal or foreign antitrust and competition laws. Examples of types of actions that are prohibited at LF Networking Fund meetings and in connection with LF Networking Fund activities are described in the The Linux Foundation Antitrust Policy. If you have questions about these matters, please contact your company counsel or Andrew Updegrave, of the firm of Gesmer Updegrave LLP, which provides legal counsel to The Linux Foundation.
- › Linux Foundation Antitrust Policy: <https://www.linuxfoundation.org/antitrust-policy>

MAC Meeting Agenda - April 26, 2023

- MAC Member outreach
- Activity & content
- Website review
- Events
- Project Ops

MAC Member Outreach

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

MAC rejuvenation

- Outreach to identify MAC Member representatives
 - Are you the right person? If not, who is?
- Benefits of the MAC
 - Co-marketing support
 - Social media amplification
 - Marketing planning for projects
 - Amplification of project PoCs, deployments, and other usage

Integrated & Diverse Marketing Channels

Events and Conferences

Host and support relevant events including LFN project events, industry events, local meetups and more



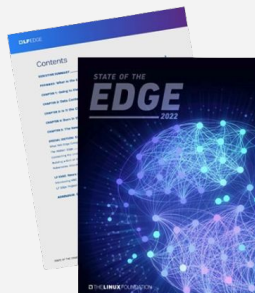
Social Media Channels

Promote LFN and its projects on websites, social media channels, email marketing and regular webinars



News and Publications

Draft and publish Blogs, newsletters, project case studies, White Papers, Thought Leadership content and more



Public Relations

Maintain public relations and host meetings with media & analysts. Publish press releases and thought leadership pieces to improve brand awareness



VentureBeat



TechCrunch

Partnership Marketing

Collaborate with adjacent Foundations, project communities, Standards groups, and LFN members to promote the LFN brand



Activity & content

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

Board-Driven Project Objectives 22-23

- **Identify & Tackle consumption barriers, celebrate success (Accelerate POC to Production)**
 - Ease of project consumption (Integration, Interop, upgrades, CI/CD, tools, processes people, documentation, etc.)
 - Demonstrate Enterprise & Government consumption (end-to-end 5G, API, modularity of projects, use case driven open interop/integration)
 - Track Market Success for repeatability (case studies, marketing, communication, etc.) & identify post deployment requirements/gaps
- **Enable Cloud, Telecom & Enterprise Ecosystems collaboration**
 - Enable Open Interop & Integration Projects or initiatives (Anuket, 5G Super Blueprint)
 - Facilitate Collaboration in LFN with CNCF, LF Edge, ORAN SC, OIF as top priorities
 - Increase focus on Enterprise use cases and ecosystem
 - Promote Research & Community Insights in Enterprise, Telecom, Cloud Ecosystems coming together
- **Maintain and Grow Community (Developers, Projects, Members, Innovative ideas)**
 - Focus on Documentation and Technical Marketing of projects / onboarding, etc.
 - Focus on Developers & Satisfaction (tools, surveys) & attracting system integration developers & testers
 - Maintain/Grow Members (including ISVs)
 - Create opportunities for new innovation and experimental ideas across ecosystem

LF Networking: Largest Open Source Networking Sub-foundation across Cloud, Telecom & Enterprises

LFN is the Center of Gravity for Networking Solutions Across Access, Edge & Core - new technologies & new projects (Nephio, Cloud Native Network Functions - CNF TUG) & Host of Largest Open Networking & Edge Event (ONE Summit)

**MATURE,
DEPLOYED
PROJECTS**

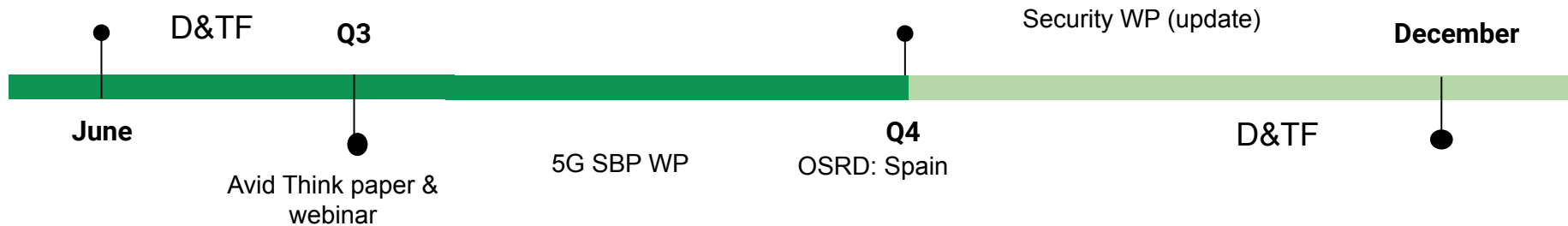
X industry Integration(5G SBP) & Collaboration(CNCF, ORAN, CAMARA, LF Edge, Sylva, LFC)

Security, AI and Networking as focus areas

ONAP release

ODL turns 10

Project based marketing



5G SBP Phase 2

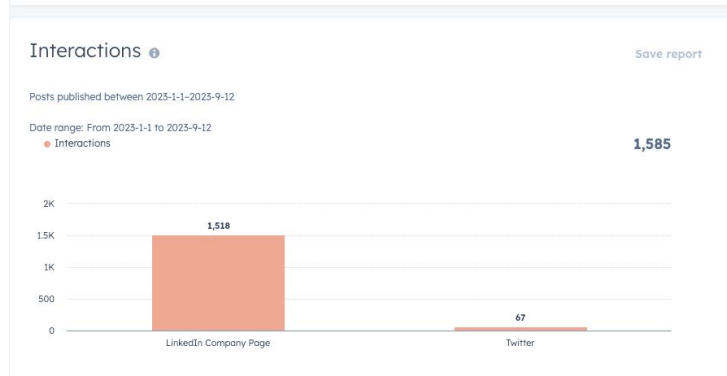
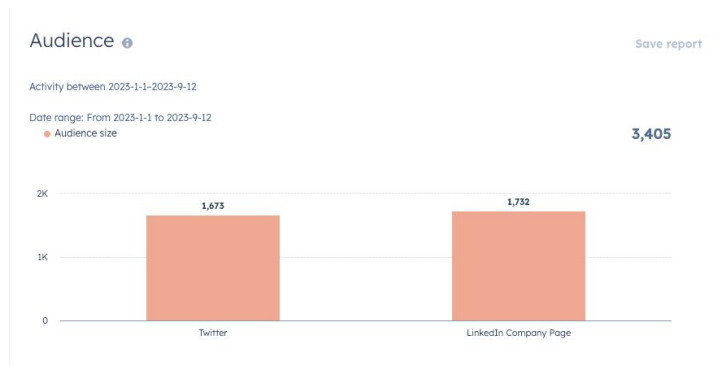
ONE Summit 24

LFN YTD in review

- ONE Summit Regional Days: 1
- Blogs published: 24
- User stories published: 2
- White papers published: 2 + 1 pending this week
- Most visited content: 5G Super Blueprint (behind / and /join)

Social Media

- Growing audience/engagement on LinkedIn
 - Posts are more successful when re-posted by others with large audience, or with video content
- Declining engagement on X/Twitter
- YouTube views strongest when content is fresh
 - FD.io & 5G SBP have the highest views



Your videos got 13,131 views in 2023



Recent Highlights

Cross-Platform Multi-Cloud Speed Boost

CABLELABS WORKS WITH EMCO FOR MULTI-CLOUD ORCHESTRATION IN WIRELESS/WIRELINE CONVERGENCE USE CASE

Moving toward the converged platforms of tomorrow, CableLabs and Aarna Networks have automated a converged platform for deploying, provisioning and managing network functions to instantiate and assure network services. This multi-cloud orchestration of containerized functions, along with the management of physical functions, provides a Wi-Fi speed boost for customers subscribed to both wireless and wireline services of an operator.

CableLabs



CHALLENGE

Typically, the mobile network and cable network don't communicate with each other, meaning that operations at internet service providers (ISPs)—whether cable or telco—are mostly siloed. What's more, most physical network implementations are operated by network- and vendor-specific network management systems (NMS) and element management systems (EMS), creating further barriers to interoperability and limiting potential use cases. For example, increasing home internet connection speed delivered over cable networks often requires manual requests and configuration.

Convergence is a major focus at CableLabs. We're always seeking to uncover and develop new, value-added use cases for members. Leveraging open-source projects to perform multi-cloud orchestration, we looked to automate workflows and policies to take advantage of users connected to wireline and mobile services from the same operator by offering unique value.

ABOUT CABLELABS

AS THE LEADING INNOVATION AND R&D LAB FOR THE CABLE INDUSTRY, CABLELABS CREATES GLOBAL IMPACT THROUGH ITS MEMBER COMPANIES AROUND THE WORLD AND ITS SUBSIDIARIES, KYRIO AND SCTE. WITH A STATE-OF-THE-ART RESEARCH AND INNOVATION FACILITY AND A COLLABORATIVE ECOSYSTEM WITH THOUSANDS OF VENDORS, CABLELABS DELIVERS IMPACTFUL NETWORK TECHNOLOGIES FOR THE ENTIRE INDUSTRY.

SOLUTION

CableLabs, working with the Aarna Networks team, used the open-source Edge Multi-Cluster Orchestrator (EMCO) to develop a proof of concept (PoC) for operations convergence by way of a Converged Service Management Layer (CSML).

In phase 1, the team onboarded EMCO and built basic CSML capabilities, including service orchestration, assurance with data collection and closed-loop automation. The PoC involved the deployment and management of the Intelligent Wireless Network Steering (IWNS) application developed within CableLabs, which is the predecessor of Kyrio's new Adaptive Route Control (ARC).

In phase 2, the team integrated PNFs to demonstrate hybrid (both physical and virtual) service orchestration and configuration, enabling a Wi-Fi speed boost to an internet user automatically, without the need for a manual request or service call. The model uses EMCO as the CSML to communicate with a PacketCable MultiMedia (PCM/MM) controller built on the Linux Foundation Networking OpenDaylight pre-service flows and connects via Secure Shell (SSH) to the cable modem termination service flows.

Phase 3 introduces convergence across mobile and cable domains with a mix of 2 containerized network functions across three cloud platforms. In the demonstrator with home internet and mobile service from the same operator automatically 10g Quality of Service (QoS). Once the mobile device connects to the home internet, it is detected to be also registered with the 5G Core, the CSML (EMCO) pushes a high flow via the PCM/MM controller and CMTS to the user's cable modem with a boost in mobile device.

OpenDaylight has had a fascinating journey and is one of the most long lived open source SDNs. This year marks the 10 year anniversary of OpenDaylight so we at The Linux Foundation Networking thought that it would be interesting to share how it has grown to be one of the most important open source projects in networking and how we think it will continue to evolve in the future.



The fascinating journey of OpenDaylight

The beginnings of SDN



Now Available!

Welcome to more O-RAN integration, CNF orchestration improvements, and intent-driven closed-loop autonomous networks

GSMA™

ETSI NFV: A Decade of Transformation

Tuesday 22 Aug 2023 | GSMA Open Gateway | Open Gateway |

Over 10 years ago, the telecommunications industry was beginning an introspective transformational analysis of its systems and business models. At the same time, cloud computing was coming into its own and challenged dominant conventional virtualization technologies (CAPEX-based) by introducing demand-based consumption systems (OPEX-based) that resulted in the popularization and adoption of Infrastructure-as-a-Service (IaaS). A handful of telecommunications companies and ETSI published the ETSI NFV white paper, kicking off a decade of transformation.

Read the blog from LF Networking's Ranny Haiby:

[ETSI NFV: A Decade of Transformation – LF Networking](#)

Future Networks



NEW FD.IO RELEASES ADD FEATURES, ARCHITECTURE SUPPORT, BUG FIXES, & MORE

- **Calico-VPP v3.26.0:** automated build & integration test, BGP filter support, VPP upgrade, and more
- **VPP 23.06:** 24 new features, more DPDK support
- **CSIT 23.06 Report** has a new format



Upcoming Activity

- Original White Paper: *Defining the 5G Super Blue Print*
- Analyst Research Brief: *Shared Code, Shared Future* (AvidThink)
- Silverlinings' elco Core Strategies event panels 9/18:
 - Heather Kirksey on “Realizing Network Potential with 5G Open Core”
 - Ranny Haiby on “Ovecmong Complexities by Automating your Cloud Core”
- LFN Community Voices videos:
 - Fatih
 - More to be filmed onsite in Bilbao & Shanghai)
- Mini AI campaign (based on LFN Board survey)
- ONE Summit 2024 promotions
 - *Save the date*
 - *CFP open*
 - *Register today*
- LF booth @ OCP Global Summit

Shared Code, Shared Future

The Rise of Open Source in Networking



Website Review

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

LFNetworking.org

- Metric mess
 - Multiple paths to reach content & content housed in multiple locations
 - Auditing website with recommendations for improvement
 - Migration to GA4 created “unspecified” and “not available” web page designations breaking analytics
 - Web team working to resolve
- Updating & streamlining nav (menus & drop-downs)

Event Strategy

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

Events

- 2023 ONE Summit Regional Days
 - NA = Vancouver (May)
 - EU = Bilbao (Sept.)
 - APAC = Japan (Dec.)
 - India = Bengaluru (Nov.)
- 2023 D&TF
 - 2x virtual, 1x in-person (Hungary)
- 2024 ONE Summit + D&TF
 - San Jose Convention Center
 - April 29 - May 1, May 2 - 3

Project Ops

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

Program Managers' inputs

- ONAP soft rebrand
 - ONAP is now a proper name and not an acronym
 - Tagline: “Next generation network automation”
- ODL website refresh
 - Intern work completed
 - Awaiting imagery from CS
 - Awaiting TSC decision to go live
- Project pitch
 - Prompt: Kenny Paul re. “Why a project should join LFN?”

*Next Meeting: January 17, 2023
(or sooner as necessary)*

 THE **LINUX** FOUNDATION

 **LF** NETWORKING

A background graphic featuring a network of glowing blue lines connecting various yellow circular nodes, set against a dark blue gradient background.

Thank
You!

 **LF** NETWORKING

 **THE LINUX** FOUNDATION