

Nephio TSC Meeting

Jan 18, 2024

THE LINUX FOUNDATION





Antitrust Policy Notice

- Linux Foundation meetings involve participation by industry competitors, and it is the intention of the Linux Foundation 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 US state, federal or foreign antitrust and competition laws.
- Examples of types of actions that are prohibited at Linux Foundation meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at http://www.linuxfoundation.org/antitrustpolicy. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrove of the firm of Gesmer Updegrove LLP, which provides legal counsel to the Linux Foundation.

THE LINUX FOUNDATION

ILFNETWORKING



Meeting Information

- Zoom Meeting Information
- https://zoom-lfx.platform.linuxfoundation.org/meeting/91267803435

Note: Anyone that accesses the link will be prompted to register for the meeting at which point they also add themselves to the invite list.





Etherpad - Meeting Minutes

- https://etherpad.lfnetworking.org/p/Nephio-TSC-2024-01-18
- > Join the etherpad and set up your name and text color
- Meeting attendance no longer needed unless quorum is being tracked for a vote during the meeting. LFX tools zoom long will be uploaded post meeting to capture all attendees.
- > Please help: The more that participate, the better the minutes



Using the Mail Lists



> All groups.io email lists are <list name>+subscribe to subscribe, just email it (content does not matter)

> TSC

Post: nephio-tsc@lists.nephio.org

Subscribe: nephio-tsc+subscribe@lists.nephio.org

Development

Post: nephio-dev@lists.nephio.org

Subscribe: nephio-dev+subscribe@lists.nephio.org

SIG Automation

Post: <u>sig-automation@lists.nephio.org</u>

Subscribe: sig-automation+subscribe@lists.nephio.org

SIG NetArch

Post: sig-netarch@lists.nephio.org

Subscribe: sig-netarch+subscribe@lists.nephio.org

SIG Release

Post: sig-release@lists.nephio.org

Subscribe: sig-release+subscribe@lists.nephio.org

SIG Security

Post: sig-security@lists.nephio.org

Subscribe: sig-security+subscribe@lists.nephio.org

> Once you have subscribed, login to lists.nephio.org (ask for a link to be sent), then edit account details





TSC Members



Name / Alternate	Organization
Alessandro D'Alessandro / Fabrizio Moggio	TIM
Bala Varadaraju	RedHat
Bernard Tsai	Deutsche Telekom
Ciaran Johnston	Ericsson
Eric Debeau	Orange
Hunor Demeter / Padma Sudarsan	VMware
Iain Wilkinson / Riccardo Gasparetto Stori	Vodafone
Kandan Kathirvel (Chair)	Google
Raj Panchapakesan / Rahul Jadhav	AccuKnox

Name / Alternate	Organization
Ravi Ravindran	F5
Sagar Arora	OpenAirInterface
Sana Tariq (Vice-Chair)	TELUS
Sandeep Sharma	Aarna Networks
Sebastian Scheele	Kubermatic
Seshu Kumar Mudiganti	Wind River
Sundar Nadathur	Intel
Timo Perala	Nokia
Victor Morales	Samsung





Agenda



- Antitrust Policy, Minutes, and Action Items
- SIG Status
 - [Sana & Alexis] NetArch
 - [Tal] Automation
 - > [Balaji & Radoslaw] Release
 - [Raj] Security
- > Events
- Other Topics
 - Nephio representation at LFN Committees
- > Q&A





SIG Updates

THELINUX FOUNDATION





SIG1 NetArch [Sana & Alexis]

- General
 - R2 Architecture
 - R3 Scope, Target Architecture,
 - Beyond R3 Roadmap

> 5 Working Groups

- 1. Architecture and Roadmap (interim lead SIG1 chair/co-chair)
 - i. Initial Nephio Component Architecture
- O-RAN (lead Tim / Qualcomm)
 - i. <u>Target Deployment Architecture, Objective and User Stories in progress for R3</u>
- 3. Release Scope and User Story (interim lead SIG1 chair/co-chair)
 - i. More than 10 user stories in progress / potential for R3
 - ii. Scoping is starting this Fri
- 4. Experience and Modelling (lead Ciaran / Ericsson)
 - i. Initial Draft of Current State of Modelling
- 5. Service Assurance and Policy (lead Subhash / Samsung)
 - i. Objectives and User Stories in progress for R3





Planned Release Artifacts - R2

Release Deliverables

- Features
 - Enhanced multi-vendor support
 - Enhanced multi-cloud support
 - Onboarded OAI components
 - > RAN use case
 - Integration with new release of Porch
- Technical debt
- Documentation

Exploration (Spikes and PoCs)

- Nephio SDK
 - > Helm support
- Topology controller



R2 Deliverables - Features

- Multi-vendor support
 - ➤ API changes
 - ➤ Generalization
 - Parameterization
 - > Reuse of params
- Multi-cloud support
 - ➤ Sandbox
 - ► GCP
 - OpenShift
- OAI components
 - > Deploying many OAI 5G core and RAN components (CU and DU) NFs via Python-based operators
 - ➤ End-to-end call
- Integration with new release of Porch
 - ➤ Stability
 - ➤ Security
 - > Repo watcher changes
- Documentation
 - > Shiny new documentation generation
- Experimental: Nephio SDK
 - > Flux-based deployment of Helm charts
 - ➤ Helm-to-operator converter
- Experimental: Topology Controller
 - Northbound API to express the network topology



R2 Deliverables - Technical Debt

Product

- Removing rigid dependency on Gitea
- > Fixing the Multus version
- ➤ ConfigMap generator function
- > WebUI configuration options for authentication
- Reorganizing the package catalog
- Reduce hardcoding of NF parameters
- Stability of end-to-end tests
- > Porch improvements
- Documentation enhancements

Process

- Run integration tests prior to merging PRs
- ➤ Improve unit test coverage for PRs
- > Automate release process
- ➤ Enable Molecule integration tests to be invoked automatically
- ➤ Automate upgrade of Prow libraries
- > Added nephio-experimental GitHub org, reorganized our repositories



Code Scans

Copyright and licensing scans

Fossology instance will run the final scan of whole codebase:

https://fossology.nephio.io/repo

https://prow.nephio.io/?type=presubmit&job=*fossology*

https://prow.nephio.io/?type=presubmit&job=*scancode-toolkit*

https://prow.nephio.io/?type=presubmit&job=*lichen*

Security scans

Results for R1: https://secreports.nephio.io (for R2 once images are built)

https://securityscorecards.dev/viewer/?uri=github.com/nephio-project/nephio



Coordinates for Artifacts

- Code
 - All release artifacts: https://github.com/nephio-project/
- Images
 - https://hub.docker.com/u/nephio
- Docs
 - https://github.com/nephio-project/docs





SIG3 Release [Balaji & Radoslaw]

>





SIG4 Security [Raj & Tom]

>



Events

TILFNETWORKING
THELINUX FOUNDATION



ONE Summit - APRIL 29 - MAY 3, 2024

- https://events.linuxfoundation.org/one-summit-north-america/
 - Mon Co-Located Events
 - > Tue & Wed Keynotes, Breakouts + Technical Showcase
 - > Thr & Fri Developer & Testing Forum (D&TF)
- Nephio Related Talks
- > LFN Booth participation



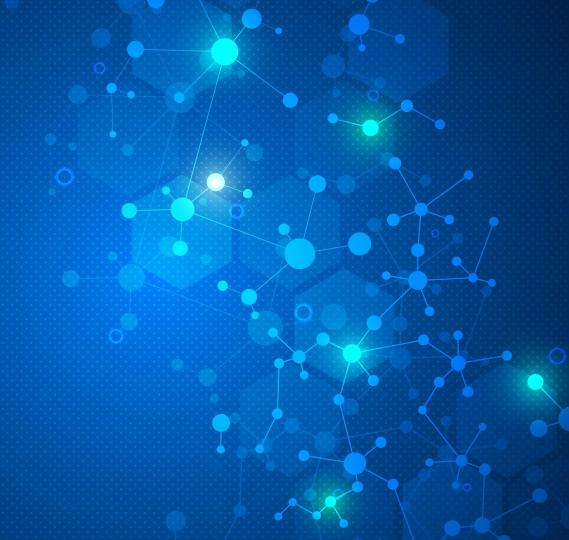
Bay Area Meetup

```
Security, transport, other topics?
```



Other Topics

THELINUX FOUNDATION



LFN Committee Representation [Timo]

- > Email to TSC: https://lists.nephio.org/g/nephio-tsc/message/203
- Graduated Projects in LFN are entitled to voting representation on SPC, TAC, and the MAC if desired
- Wiki Page https://wiki.nephio.org/x/KgAmAw



Documentation Licensing (Ciaran)

The Contributor License Agreement refers to documentation licensing:

iv. Documentation will be received and made available by the Project under the Creative Commons Attribution 4.0 International License

https://wiki.nephio.org/display/HOME/Contributor+License+Agreement

In contrast, the actual documentation repo (and other documents in other repos) are licensed under Apache 2.0:

https://github.com/nephio-project/docs/blob/main/LICENSE

Is this an oversight, and should we change the license at least in the main documentation repository?