# **Series Introduction**

Nephio R1 Concepts and Tutorials Episode 1 July 2023

Prerequisites: - None

https://nephio.org/learn



John Belamaric, Sr Staff Software Engineer, Google Nephio SIG Automation Chair Kubernetes SIG Architecture Co-chair

NEPHIO

## Nephio's Mission

Nephio's goal is to deliver carrier-grade, simple, open, Kubernetes-based cloud native intent automation and common automation templates that materially simplify the deployment and management of multi-vendor cloud infrastructure and network functions across large scale edge deployments. Nephio enables faster onboarding of network functions to production including provisioning of underlying cloud infrastructure with a true cloud native approach, and reduces costs of adoption of cloud and network infrastructure.

#### What

- Automate deployment of network functions and their infrastructure
- Automate management of network functions and their infrastructure
- Work across large scale, geographically distributed edge deployments
- Multi-vendor cloud and network function support

#### How

- Intent-driven and declarative
- Kubernetes as the underlying platform

#### Why

- Get network functions to production faster
- Reduce costs of adoption of cloud





### About this Series

"Episodes" covering Nephio Release 1 and the underlying concepts

All episodes available at https://nephio.org/learn

• Check back for new episodes

Each episode in the series includes:

- Prerequisite episodes to understand the content
- A short presentation
- A short video
- A wiki page for Q & A
- Pointers to additional resources

Most episodes also include exercises to try out the ideas

### <u>Suggestions and contributions</u> are welcome!





### About the Nephio Community

Open source project in the Linux Foundation

**Project Resources** 

- Learning page <u>https://nephio.org/learn</u>
- Site <u>https://nephio.org/</u>, <u>https://nephio.org/about/</u>
- Wiki <u>https://wiki.nephio.org/</u>
- Docs <u>https://github.com/nephio-project/docs</u>
- Blog Postings <u>https://nephio.org/blog/</u>
- Slack <u>https://nephio.slack.com/</u> (join via this <u>invitation</u>)
- Project Github <u>https://github.com/nephio-project</u>
- Project email distro <u>https://lists.nephio.org</u>
  - <u>nephio-tsc</u> (for TSC members and interested parties)
  - <u>nephio-dev</u> (for all)
- SIG lists: <u>sig-netarch</u>, <u>sig-automation</u>, <u>sig-release</u>





### **Next Steps**

- Episode 2 Why Nephio?
  - What problems is it solving?
  - How is it different?
- Episode 3 The Nephio Approach
  - Core Nephio Principles
  - Declarative versus Imperative Management
  - Kubernetes and KRM
  - Configuration-as-Data
- Episode 4 Setting Up a Demo Environment



