

Nephio Introduction

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18.October.2023



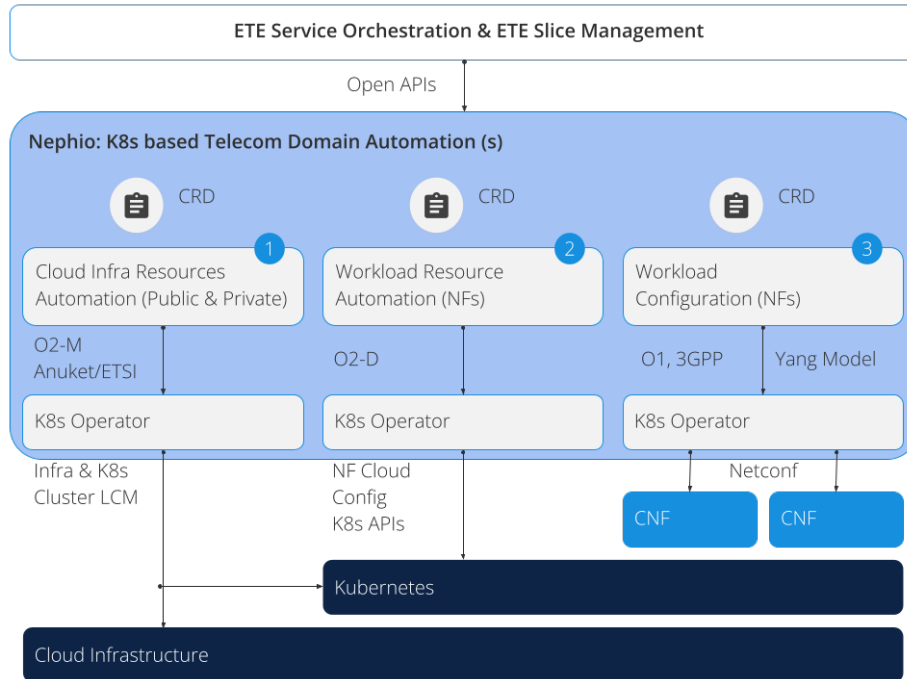
What is Nephio



“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.”

Source: <https://wiki.nephio.org/pages/viewpage.action?pageId=28510591>

Overview



Nephio focuses on extending K8s to support unified automation with:

- K8s based CDRs and Operators for each Public and Private cloud Infrastructure (in conformance with Standards: 3gpp; O-RAN O2...)
- Workload cloud resource automation
- Workload configuration (e.g. NF level)
- Service Orchestration is not in the scope

Release 1 (May 2023)

- Create Kubernetes clusters
- Fully automated deployment of UPF, SMF and AMF services of free5Gc.
- Deployment of other free5gc functions.
- Auto scaling up of the UPF, SMF and AMF services based on changes to the capacity requirements expressed as user intent

Release 2 (November 2023)

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