2023-11 - Nephio & kpt: a new kid in the CNCF sandbox

Short Description

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A brief introduction to the kpt CNCF project that is also in the heart of Nephio, and some more details about the inner workings of Nephio Release 1

Topic Overview

Have you heard of GitOps? There is a good chance that you have, since it is one of the hyped buzzwords nowadays. GitOps principles are great, and if you apply them to you Kubernetes application you will end up storing a bunch of Kubernetes Resources in Git in YAML manifest files. Nice, but are there any tools out there that can help you write code that manipulates those YAMLs? Well, let me introduce a newly adopted CNCF project, named kpt. I will show you how to express your configuration data following the Kubernetes Resource Model (KRM), how to package your application in a way that is editable by code (so definitely not in Helm packages), and how to write Kubernetes Controllers that manipulate your application package and gradually adapts it to its ever changing environment.

After a brief introduction to kpt, a new kid in the CNCF sandbox, we will discuss how Nephio uses the kpt project, how Nephio is shaped by the Configuration-as-Data principles, and hear some explanation of the dirty details of Nephio Release 1.

Session Type

X	Interactive technical presentation and/or capability demo
	Pre-Recorded technical presentation and/or capability demo
	Live / hands-on technical training
	Community process, governance or collaboration development
	Real-time troubleshooting, bug-scrub or similar
	Other (please describe)

Slides & Recording

> ⓘ **YouTube**
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> Following the event session recordings may be uploaded to our YouTube Channel at the full discretion of LFN staff.

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Notes From Session (as appropriate)

Action Items (as appropriate)

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