

2022-01-12 - 5G SBP: Realizing multiple network slices & MEC Apps in each slice with LFN/LFE/CNCF projects

Topic Leader(s)

- [Palaniappan Ram](#)
- [Srinivasa Addepalli](#)

Topic Overview

60m [Palaniappan Ram](#)

8am ET

In this presentation, we will talk about how we have created a functional network slicing E2E demo with all open source projects, EMCO capabilities, automation required to support various 5GC deployments, and what else is needed for 2022 planning.

Topic Overview

In this presentation, we will talk about how we have created a functional network slicing E2E demo with all open source projects. Following open source projects are used

- Free5GC for 5G Core
- UERANSIM to simulate UEs and gNBs.
- Video MEC workload
- Kubernetes based platform
- ICN-K8s for Telcos
- EMCO to orchestrate slices & MEC applications
- SDEWAN to connect Edges securely
- SDEWAN avatar to steer the traffic from UPFs to MEC applications.
- Nodus for creating multiple networks and also to expose these networks & provider networks to CNFs.

This presentation shows that 5GC, with no changes to it, can support slicing by instantiating 5GC as many times as the number of slices.

This presentation also shows the EMCO capabilities and automation required to support various 5GC deployments. In particular, this presentation showcases the following options.

- UPF in one K8s cluster and all control plane CNFs in a different cluster.
- SMF, UPF, AMF in one K8s cluster and rest in a different cluster.
- All 5GC CNFs running one K8s cluster

At the end, we will talk about what else is needed and some plan for 2022, mainly in regards to following

- Automation needs.
- Performance isolation needs
- Security isolation needs
- Type of observability & closed loop actions needed to maintain SLAs even when there are noisy neighbors.

Slides & Recording



YouTube

Demo / Informational



video2493471076.mp4

Agenda

Awesome presentation

- Point 1
- Point 2

Minutes

Action Items

