DEVOPS IN SERVICE CHAINS AND 5G NETWORK SLICES

Telenor Research, Telenor’s own corporate research unit, plays a key role in providing insights and competences that enable Telenor to become a customer-centric software and data driven company utilizing the latest development within technology.

Open Source MANO

Open Source MANO is an ETSI-hosted project to develop an Open Source NFV Management and Orchestration (MANO) software stack aligned with ETSI NFV.

Telenor 5G Infrastructure

Slice 1: Broadband
- KPI: Throughput

Slice 2: Massive IoT
- KPI: Packet Loss

Slice 3: Industrial
- vEPC, vUP, vRouter, vVPN, vEPC

RIFT.io

RIFT.io provides the open source standard platform for the construction and automated deployment of scalable, virtualized network services. RIFT.io technology and services empower enterprises to successfully deploy virtualized network services on private and hybrid cloud, and accelerate service providers’ efforts to deploy NFV-enabled virtualized networks.

POC DRIVERS

Achieving service agility and ensuring exceptional quality of experience are top goals for service providers.

Service providers require active testing and monitoring that is orchestrated and fully automated:
- Cope with the rapid rate of change in dynamic, virtual network environments.
- Meet critical SLAs for 5G network slice deployments.
- Remove uncertainties around network quality.
- Ensure services are delivered right the first time.

Key Concepts

NFV Orchestration is a critical enabler for automated active testing and monitoring of dynamic network services.

Enhance profitability of existing infrastructure investments by orchestrating optimal location to run VNFs and optimizing their performance.

Introduce DevOps approaches to enable Automated, Active Assurance:
- Active testing is key for DevOps and can be fully automated during 5G network slice deployment.
- Include Test Agents in network service design and use the service model to describe what KPIs to actively measure.
- Test prior to customer launch and each time changes or updates are introduced.
- Active monitoring of individual slices allows for proactive troubleshooting and self-healing.

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Netrounds

Netrounds is an active network analytics solution provider for physical, hybrid and virtual networks. Netrounds’ programmable, software-based test and service assurance capabilities enable telecom operators and service providers to enhance the end user experience of IP-based services such as Internet, TV, voice and other quality-demanding business services.

Intel

Intel expands the boundaries of technology to make the most amazing experiences possible.

Cisco

Cisco enables people to make powerful connections - whether in business, education, philanthropy, or creativity. Cisco hardware, software, and service offerings are used to create the Internet solutions that make networks possible - providing easy access to information anywhere, at any time.

Arctos Labs

Arctos Labs is a Swedish system integrator and senior consultancy firm for the telecommunications sector. They provide integration services and expertise to telecom manufacturers, operators, software and service providers worldwide. Arctos Labs is also an active participant in the Open Source MANO community.

ARCTOS LABS