Title

Automation and Orchestration of 5G Network Slices across RAN, Core, and Transport domains

Speaker

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Abstract

The evolution of 5G network slicing brings tremendous opportunities for consumers as well Service Providers. However, it comes with its challenges to orchestrate and manage such services at scale across geographies.

In this session you will gain insights into end-to-end orchestration of 5G network slices using Juniper Service Management and Orchestration (SMO) platform. We will discuss architectural building blocks, standards-based APIs, and aspects of service assurance that will enable lifecycle management of 5G network slices in a multi-cloud environment across RAN, Core, and transport domains.

We will also discuss how O-RAN is changing the mobile industry and opening the closed vendor based mobile networks to a multi-vendor open interface-based networks, enabling a new wave of innovation. This includes the application of AI/ML based use cases via Juniper RAN Intelligent Controller (RIC) and rApps/xApps., Juniper's ecosystem of partners, and the significant progress with Tier-1 Operators.

Biography

Sukhdev Kapur is Senior Distinguished Engineer in the CTO Office at Juniper Networks. He is part of 5G team. He has been driving the architectures of 5G, Edge Cloud, and Cloud Native initiatives. He leads and contributes to O-RAN Org driving 5G Standards.

Sukhdev is a technology veteran with over 35 years' experience in 5G Service Management and Orchestration, cloud computing & virtualization, highly available distributed systems, disaster recovery, policy based mobile workloads management, and software defined networks.

He was on the TSC (Technical Steering Committee) of Akraino Edge Stack as well as Tungsten Fabric in Linux Foundation. He was active contributor and participant in CNTT (Cloud Infrastructure Telco Taskforce, renamed as Anuket), TIP (Telecom Infra Project) and CNCF TUG (Telecom User Group). He was active contributor to the development of Neutron, Ironic, and other OpenStack projects as well.

Sukhdev holds several patents in 5G orchestration, 5G energy saving, cloud computing, hierarchical data center deployments, cloud-based disaster recovery, high availability, data center fabric automation, etc.