

# Juniper's Innovative O-RAN SMO and RIC Solutions

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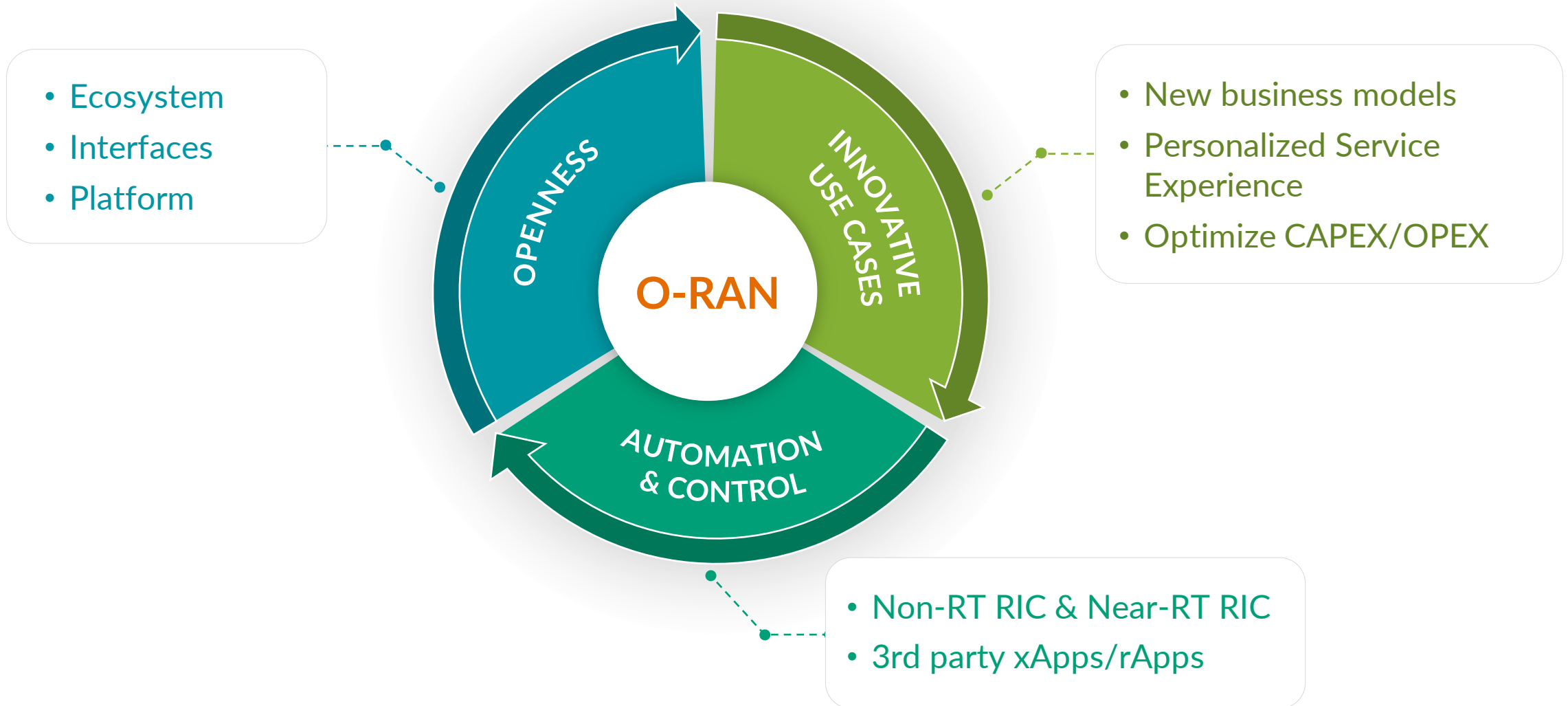
Arda Akman, Director of Engineering

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NETWORKS

Driven by  
Experience

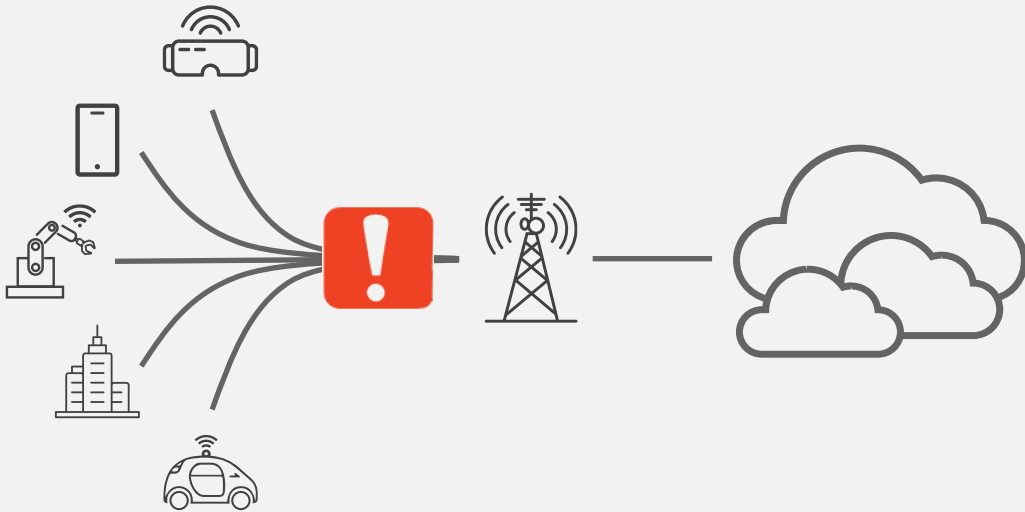
# Juniper's Approach to Unlock True Potential of O-RAN



# The Need for Network Slicing: A Foundational 5G Objective

## 4G and other monolithic networks

One-size-fits-all networks are not agile enough to support the variety of 5G services



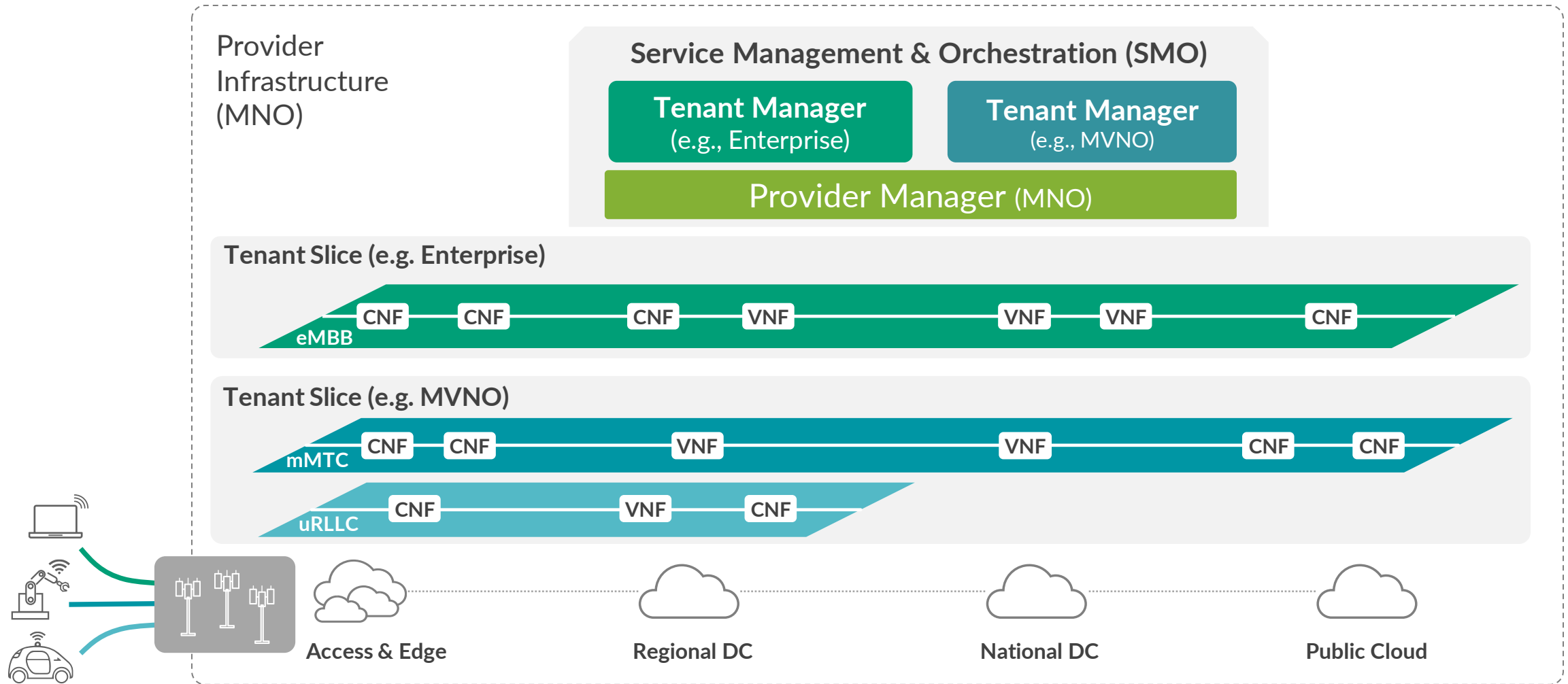
## 5G Network Slicing

Orchestration and management of dedicated end-to-end virtual networks with prescribed QoS SLA



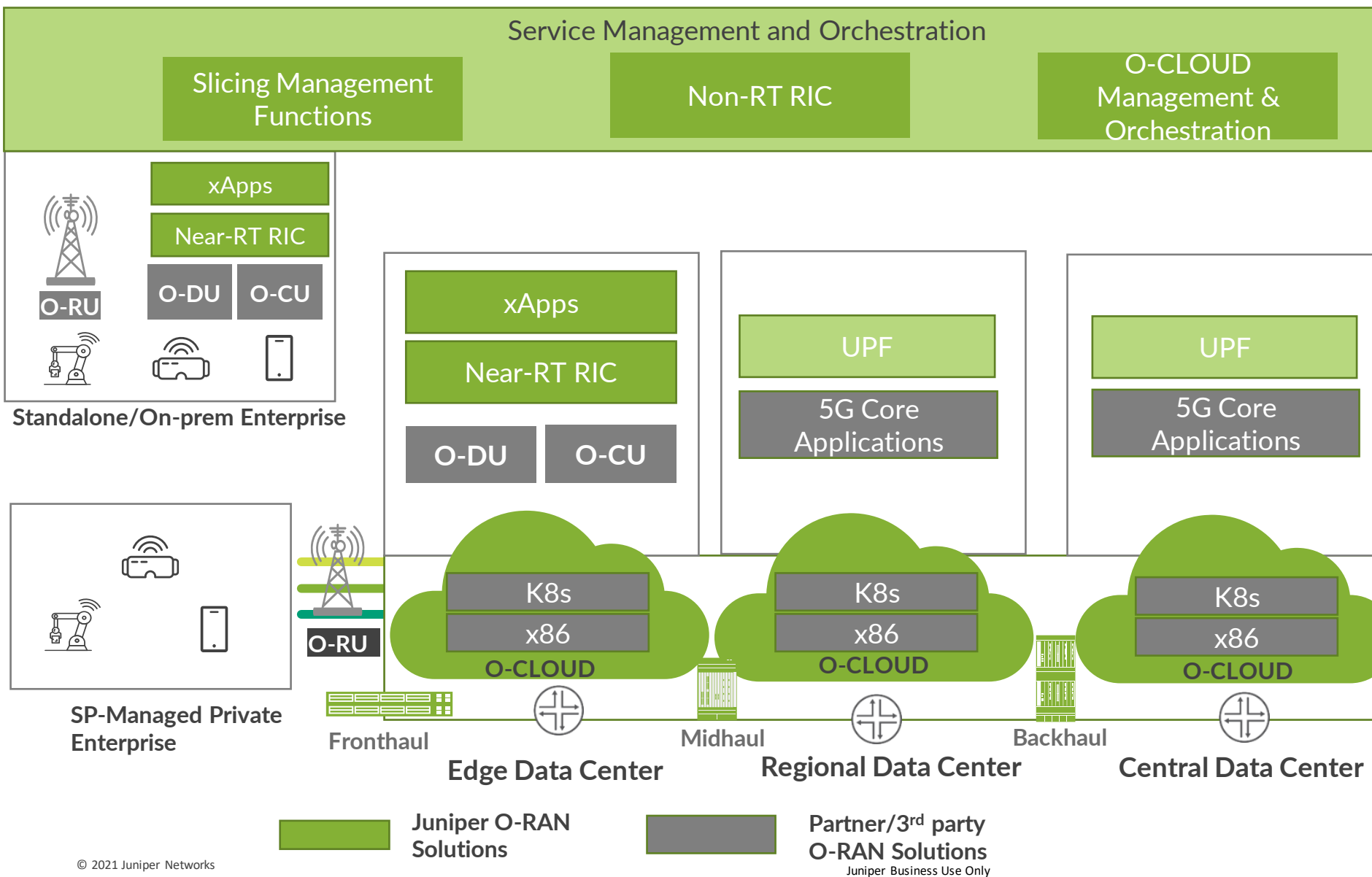
# Our E2E NS Orchestration Built Around The O-RAN vision

Multi-Cloud, Multi-Domain and Multi-Tenant





# What is Juniper's play in O-RAN?

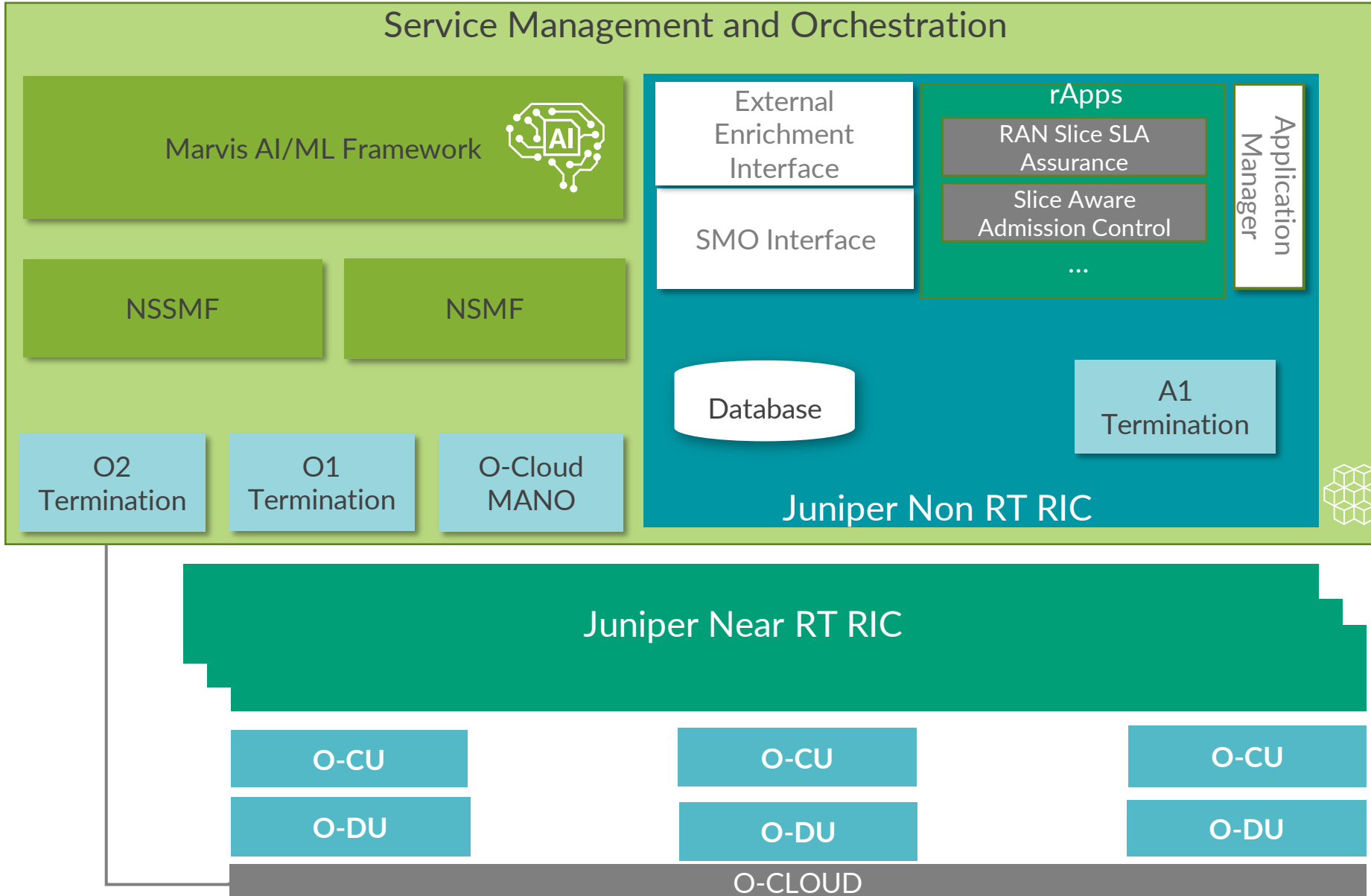


- Leadership/Contributions to 6 WGs in O-RAN Alliance
- O-RAN compliant fronthaul transport
- O-Cloud platform – CN2 Container Network Interface, Data center underlay, intent-based networking
- Open RIC Platform with Juniper and 3rd party xApps/rApps
- O-RAN Service Management and Orchestration

# Driving the O-RAN Narrative In The Industry



# Juniper Non-RT RIC Architecture

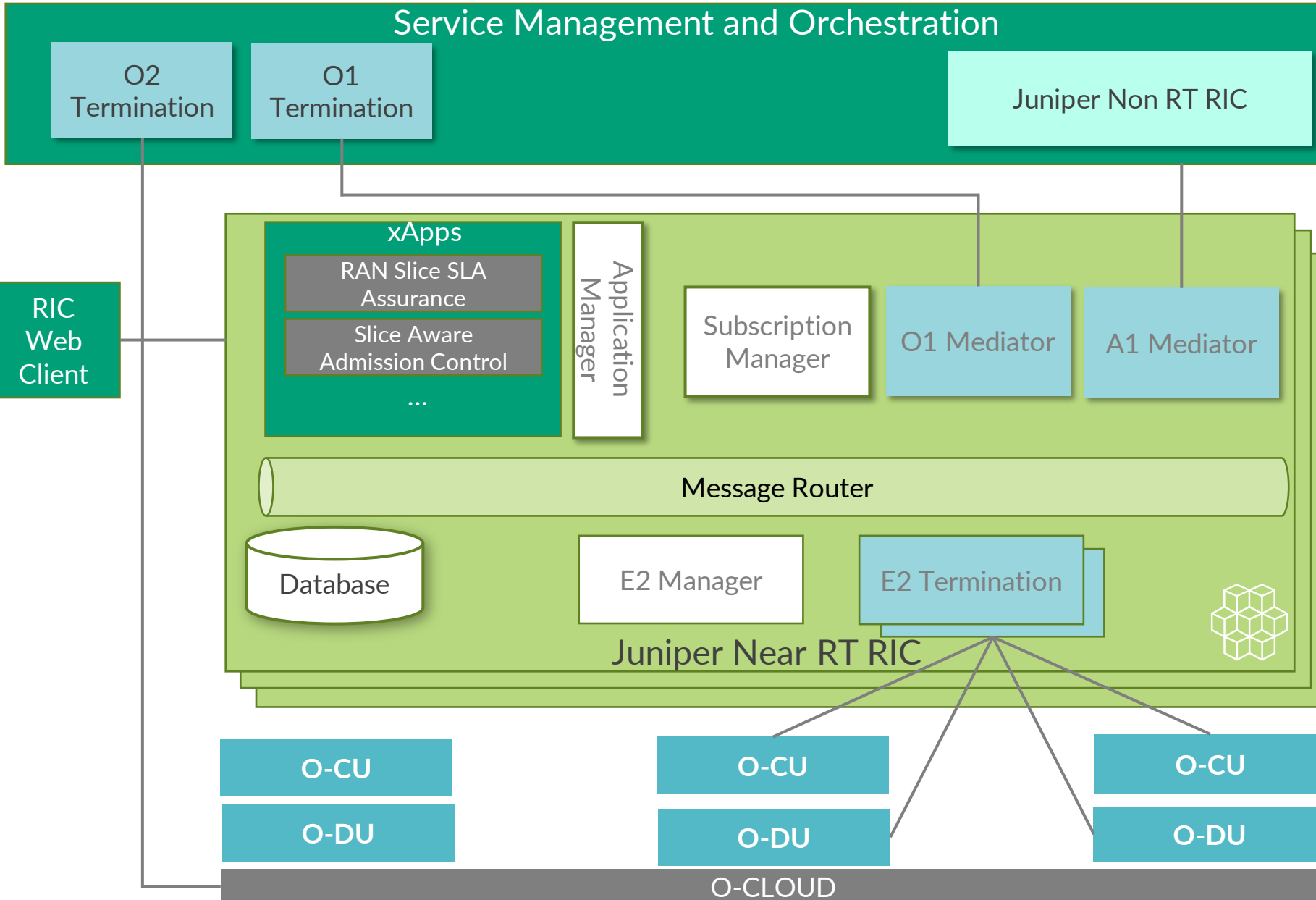


## Juniper Non RT RIC

- Juniper Marvis AI/ML Engine
- Containerized Microservices-based framework
- SaaS or On-premises. Supporting Public, Private or Hybrid Environments
- Interoperability with Juniper and 3<sup>rd</sup> party SMO
- Onboard 3<sup>rd</sup> party rApps.



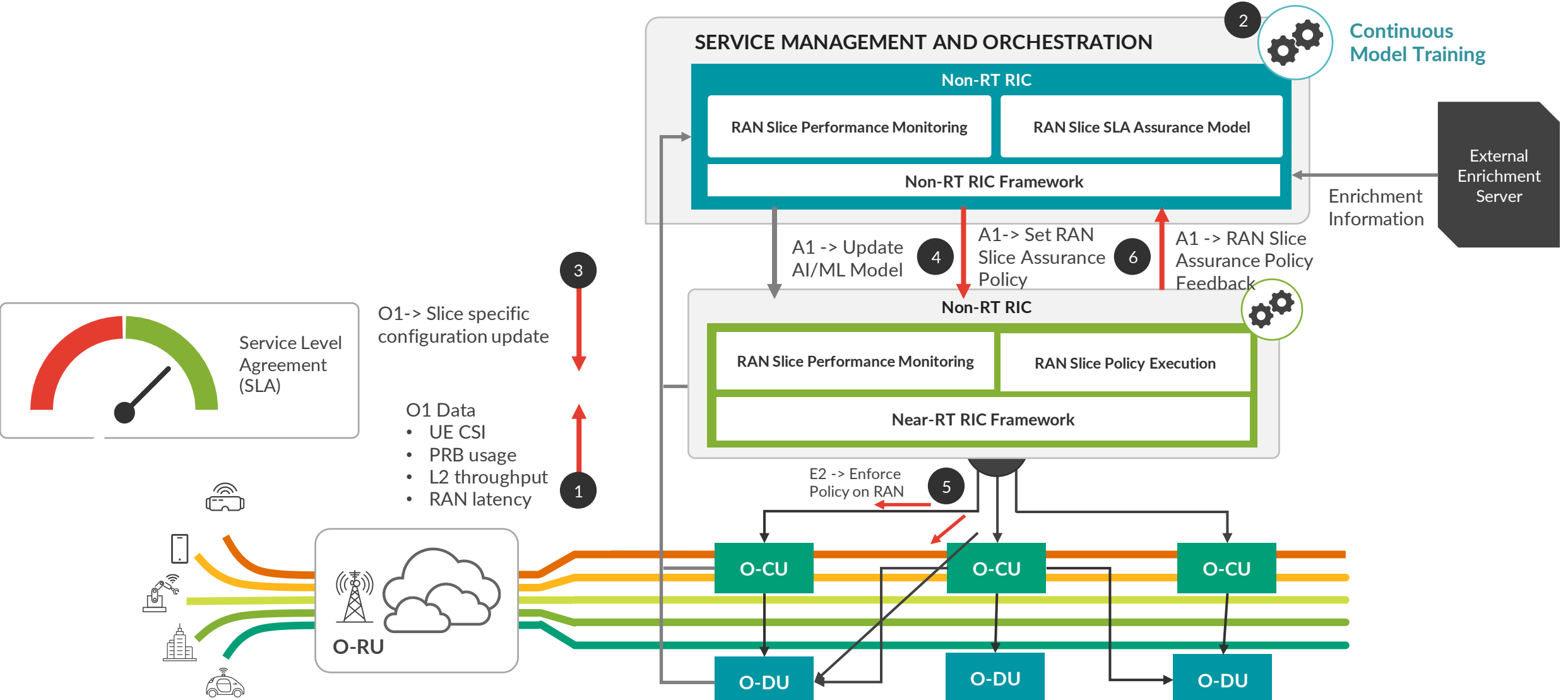
# Juniper Near-RT RIC Architecture



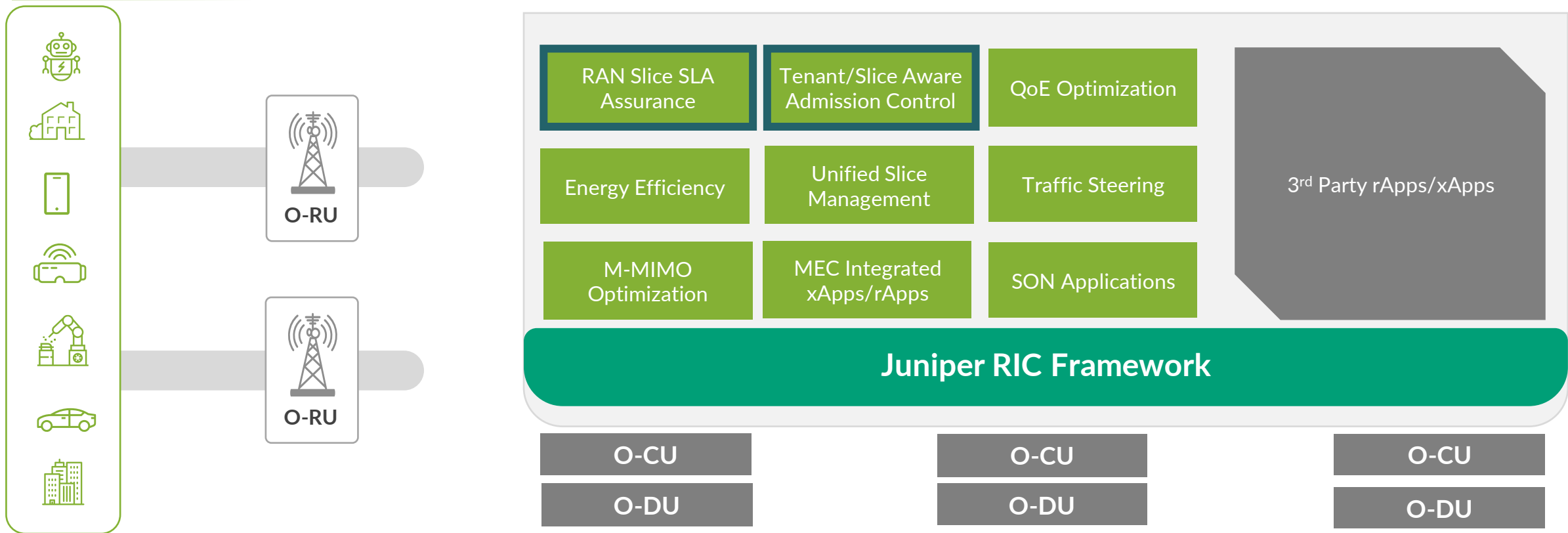
## Juniper Near RT RIC

- Containerized Microservices-based framework
- SaaS or On-premises. Supporting Public, Private or Hybrid Environments
- Interoperability with Juniper and 3<sup>rd</sup> party SMO
- Onboard 3<sup>rd</sup> party xApps.

# Network Slicing (RAN Slice SLA Assurance) Use Case



# Juniper xApps/rApps – Key Use Cases and Progress

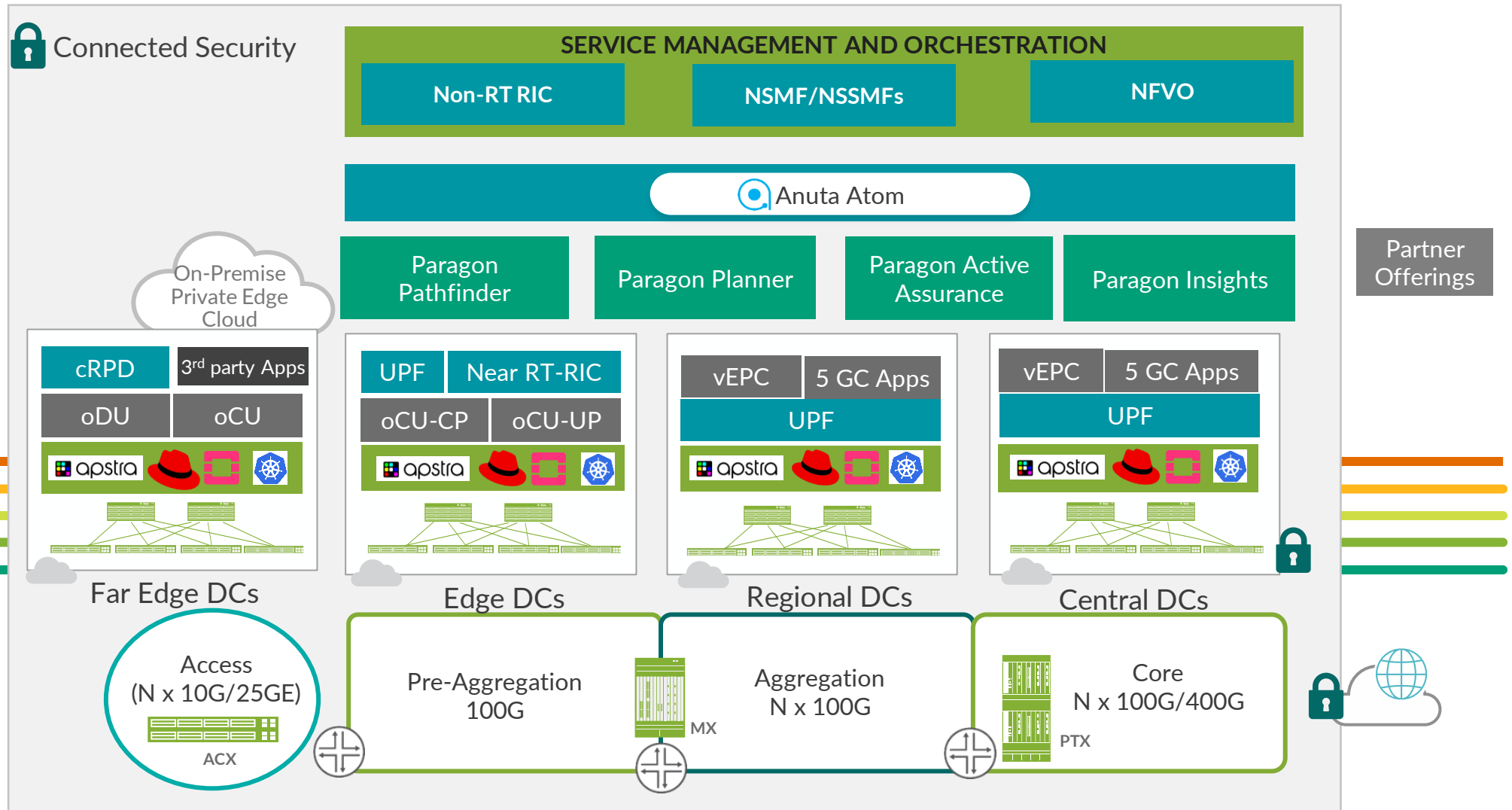


Integration with major DU/CU vendors

RIC trial with Tier-1 European Service Provider

Key IPR related to RIC, xApps/rApps, and slicing

# Juniper E2E O-RAN Architecture





# THANK YOU

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Simplicity