

Open RAN Toolkit

Bringing the power of MLOps & Automation



Unlocking your ORAN Network Potential

Tupl Open RAN Toolkit **optimizes** and **manages ORAN networks** by flexibly collecting data from any source and applying advanced analytics following the **SMO** and **non-RT RIC** ORAN standards.

With Tupl Open RAN Toolkit, Communication Service Providers (CSPs) can **leverage advanced technologies** such as ML and AI to **optimize network performance**, **improve operational efficiency**, and **enhance the overall user experience**.

The solution provides tools and frameworks for network optimization, fault detection, configuration management, and root cause analysis.

SMO and non-RT RIC drive value through RAN automation apps (r-Apps). The **r-Apps** empower CSPs to automate service policies, adapt to customer needs, and optimize network control and availability.

Open RAN Toolkit

Designed for **Subject Matter Experts**, leveraging **TupIOS**, Tupl's **MLOps Platform**

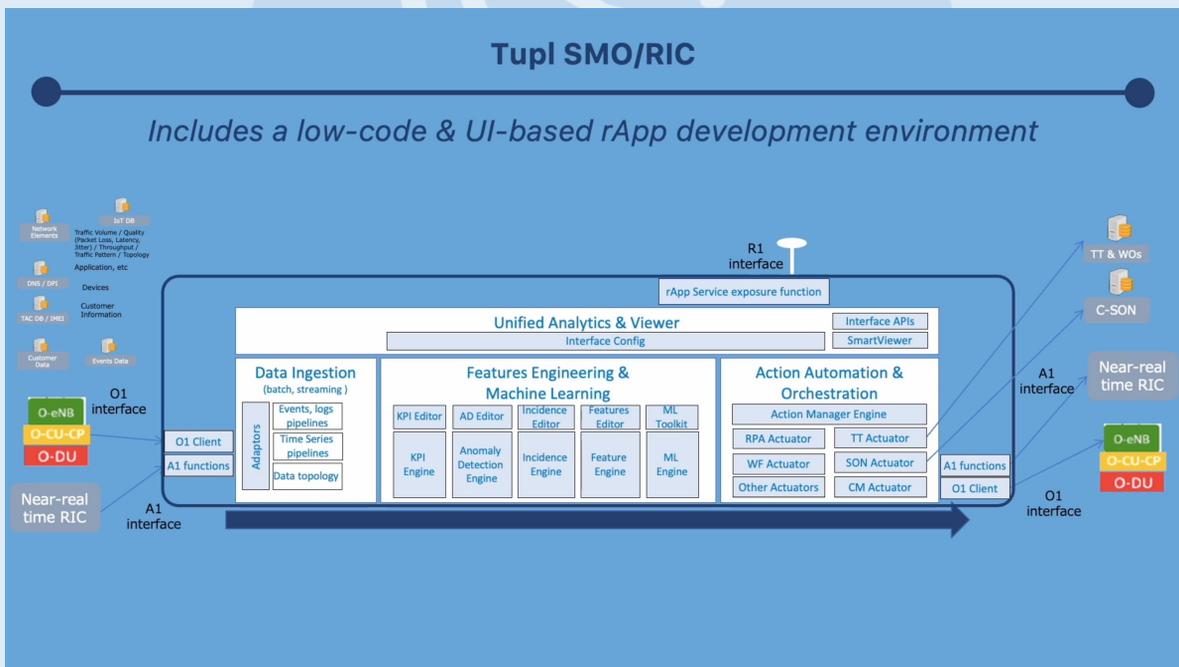


Key features

- ⦿ **Any-Data Collection:** Collect data from any type of network sources with flexibility.
- ⦿ **Advanced Analytics:** Boost the power of use case creation and knowledge digitalization with AI-leveraged analytics.
- ⦿ **ORAN Standard Support:** Connect TupIOS using the O1, A1 and/or R1 standard interfaces to start making the most of your open network now.
- ⦿ **Automatic Network Optimization:** Enhance your network performance and efficiency with always-on supervision, network forecasting and optimization.
- ⦿ **DDD r-Apps:** Design, develop and deploy rApps all in one place. Outperform your competitors: let your Subject Matter Experts make the difference by automating their data decision making.
- ⦿ **Visualize it all together:** One Web User Interface based on customizable widgets to visualize it all.

Open RAN Toolkit Architecture

- ⦿ O1, A1, R1 interfaces
- ⦿ More flexible connectors to other network data sources and actuators provided by TupIOS®
- ⦿ Advanced analytics ecosystem for KPIs, Anomaly detectors, ML features, ML model definitions
- ⦿ Automatic orchestration of actions
- ⦿ Unified viewer to visualize all aspects of your network



Key benefits

- **Fast integration thanks to compatibility with your ORAN network** and its standard O1/A1/R1 interfaces.
- **Manage your legacy network with the same approach** thanks to the flexible interface definition to communicate with any available data source and network actuator.
- **Automate** optimization actions to achieve higher network availability, improved network performance and **higher overall efficiency**.
- **Accelerate r-App deployment with minimum Level Of Effort** of r-App development to **react faster to your customer needs**.
- **Manage** a more and more complex network **better**.

