



Delivering on the Open Networks Vision

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Advance 5G, Open RAN and 6G Innovations with Our Market-Leading Solutions



Components, networks, devices

- Electronic design and simulation
- Semiconductor and component test
- Device design, validation, conformance, and manufacturing test
- Base station design and manufacturing test

Network & compute services

- Open RAN validation
- Core testing: Load test, security test

UK Sites

- 550+ Employees
- Centre of Excellence involved in
 - 5G and 6G R&D
 - Open RAN R&D
 - NTN, Satellite R&D
 - AI/ML Automation Solutions R&D

What you're looking to do if you are proposing a project

- **High Demand Density (HDD) Use Cases/Demonstrations:** Keysight would like to propose a **live to lab** test framework which can be used to test and optimize Open RAN system and its components
 - **Multi-UEs emulator** emulating live network UEs profiles (traffic, load and mobility, fading conditions)
 - **Live to Lab emulation** to simulate network impairments and congestions bringing the high capacity and load real world conditions back into the labs for testing and optimization purpose

We would like to encourage adding sustainability KPIs measures to this project as well as **energy consumption, efficiency and savings** would be of major interest for these high capacity networks

- **RIC and other RAN Software Automation:** A framework that can include (but not limited to)

- **RIC test solution emulating**

- E2 nodes, UEs (and others) training and testing the near RT RIC and xApps
- Near RT RIC, UEs training and testing the non-RT RIC, rApps and SMO
- O-RUs and UEs training and testing the Near RT RIC and Non-RT RIC/SMO
- **AI/ML enabled optimization use cases** which can be of interest may include RAN Energy Efficiency and Savings among others which we are interested to discuss with collaborators

- **Processors, RF, and other RAN Hardware:** Keysight would like to test and optimize Processors, RF, and other RAN Hardware. This can include (but not limited to)

- Keysight O-RU test solutions – pre-silicon and post silicon testing
- Keysight O-DU test solutions – Keysight test tools emulating O-RU/UEs
- Keysight RAN test solutions – Keysight test tools emulating UEs



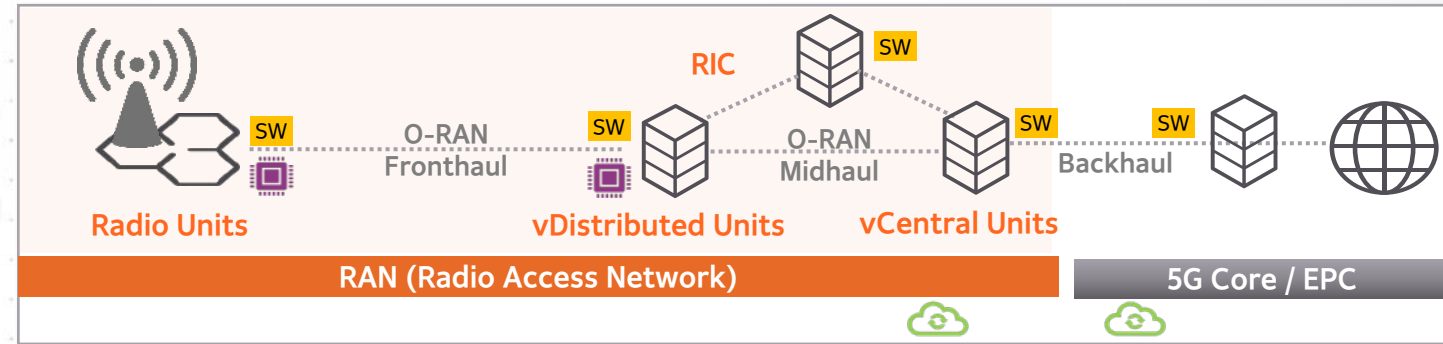
What do you have to Offer

INDUSTRY MOST COMPREHENSIVE OPEN-RAN PORTFOLIO

KEYSIGHT

Keysight Test Tools

Device Under Test (DUT)



		Lab		Field		Operations								
Test & Validate	Open RAN (O-RAN)	UE Testing		E2E, RAN & Open RAN Testing		Core & Intra-Core Testing		Infrastructure		Apps E2E Testing & QoE				
		Devices UEs	RAN Emulator	UE Emulator	RAN	RAN Emulator	Core	Transport Test	Transport Cloud	App Test	Apps			
		Test UEs		Test UEs	O-RAN xNF Emulators		Core Emulator	Cloud Test			Perf. Mon			
Open RAN (O-RAN)	Test Automation and Reporting	O-RU		O-DU		O-CU		Near RT RIC (xApps)		Non-RT RIC (rApps) / SMO				
		VSA/VSG	O-RU	O-RU Emulator	O-DU	O-DU Emulator	O-CU	E2 Nodes	Near RT RIC (xApps)	Near RT RIC	SMO, Non-RT RIC (rApps)			
		Power Supply / Analyzer	O-DU Emulator	Power Analyzer	O-CU Emulator	Power Analyzer								
Live to Lab	Test Automation and Reporting	RF Channel Impairment		RF Channel Impairment & Network Impairment				RAN Modelling		Security	Energy Efficiency and Savings	Cloudification	Pre-Silicon	Certification & Badging
		Devices UEs			RAN	Core			RAN Simulation					
		RF Channel Emulator		RF Channel Emulator	Network Emulator									

What and/or who are you looking for

POSSIBILITIES

- Keysight delivers a E2E and flexible Open RAN (Network) solutions with a number of possible deployment configurations that helps create commercial grade Open Network solutions
- Anyone working in a range of Open RAN area including:
 - High Demand Density (HDD) Use Cases/Demonstrations
 - RIC and other RAN Software Automation
 - Processors, RF, and other RAN Hardware
- We are ready to share best practices around the implementation of Open RAN standards
- Solve specific Open RAN integration problems

A dark blue cityscape at night, with numerous skyscrapers illuminated. Overlaid on the city is a network of glowing teal arcs and dots, representing a global or digital network.

Thank you

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