OpenRAN 5G NR

Whitebox - Flexible - Disaggregated - Small Cell Platform

Overview

OpenRAN 5G NR is a whitebox gNB device based on an open and disaggregated architecture for 5G Mobile Infrastructure.

Next generation 5G NR base station that is built on an open and disaggregated platform will be an anchoring node for future networks enabling MBB connectivity for a faster mobile internet and enabling a wide range of applications including AR / VR, Cloud Gaming and Smart Cities.

The OpenRAN 5G NR Project Group within the Telecom Infra Project, in conjunction with leading global mobile operators - Sprint and Vodafone - produced the definition of an open whitebox gNodeB device that meets the needs of operators for speeds and densities required of 5G nodes.

With OpenRAN 5G NR

- **OEMs can leverage the whitebox platform** to build a flexible 5G NR RAN
- **GPP based development**: No vendor specific “secret sauce” – compliant with industry standardized open interfaces, hardware acceleration, in processor and in chipset optimization etc. thus reducing dedicated HW cost.
- **Multi-vendor flexibility within the RAN**: the ability to adopt best of breed in the RAN space and reduce reliance on a single vendor.
- **Allows for a wide range of vendors to provide innovative, best of breed RU, DU and CU** compatible with GPP hardware options for a diverse set of deployment scenarios.
OpenRAN 5G NR

The developments

Streamlined Infrastructure
DU, CU is based on off the shelf platforms

Reduced CAPEX and OPEX
Virtualized DU and CU scales up and down as required

Dynamic Scalability
Reliability and capacity boosted

Improved Performance

Use cases

Dense Urban Scenario
Edge Cloud

Greenfield Deployment
Multiple deployment scenarios can be supported by a variety of off-the-shelf hardware platforms

Benefits

• With a flexible platform and software modularity, OpenRAN 5G NR enables operators to source RAN components from different vendors to build a complete disaggregated solution
• More cost-effective than traditional integrated platform solutions

Opportunities to participate

• Collaborate with 5G Ecosystem Partners
• Define use cases and technical requirements through operator discussions
• Deploy Whitebox 5G NR Platform

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What next

• Learn more at telecominfraproject.com
• Join the OpenRAN 5G NR Project Group at 5gnr.telecominfraproject.com/ to learn and contribute
• Contact us with questions or comments: 5GNR-info@telecominfraproject.com

Deployment Scenario Example

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