O-RAN Software Community Advances Open RAN Innovation with J and K Releases, Fostering Better Alignment with Industry Groups and Standards to Further Open RAN Adoption

New software releases further enable open Radio Access Network (RAN) adoption aligned to O-RAN ALLIANCE standards

San Francisco, CA, USA and Bonn, Germany — April 3, 2025 — The O-RAN Software Community (O-RAN SC), sponsored by the O-RAN ALLIANCE (O-RAN) and operated by the Linux Foundation, announced the availability of its J and K software releases strengthening collaboration across the open RAN ecosystem. These releases, based on O-RAN specifications, enhance integration between the O-RAN SC and the OpenAirInterface (OAI), enhance integration with Intel FlexRAN™ reference software, provide a more robust platform for RAN Intelligent Controller (RIC) application developers, and introduce an improved simulator for researchers. These achievements highlight the O-RAN SC's commitment to advancing open-source innovation in the RAN industry.

The J and K releases demonstrate how the O-RAN SC is meeting industry demands for open, efficient, and modular RAN software solutions. The releases also address critical issues such as interoperability, security, and scalability, paving the way for widespread adoption of open-source technologies across the telecommunications ecosystem.

"Open-source innovation is critical to accelerating the adoption of open and intelligent RAN, and projects like the O-RAN SC are poised to lead the way," said Arpit Joshipura, general manager, Networking, Edge & IoT at The Linux Foundation. "The work being done in this community is essential in reducing resources required for commercial and product offerings during the transition to next-generation technology. The recent releases represent the next step in that journey."

"In partnership with the Linux Foundation, O-RAN ALLIANCE established the O-RAN Software Community to provide the RAN industry with efficient open-source software solutions, helping to advance the development of open and intelligent RAN solutions," said Chih-Lin I, Co-chair of O-RAN ALLIANCE's Technical Steering Committee and China Mobile Chief Scientist, Wireless Technologies, China Mobile Research Institute. "We support expanding cooperation among software communities to broaden the range of open-source functions for developers and operators deploying them in their networks. A big thank you to all contributors driving the open-source innovation."

Key Features and Highlights

The J and K releases reflect critical advancements in the O-RAN SC's mission to enable open, intelligent, and interoperable RAN technologies. These releases drive open-source adoption,

improving interoperability, integration, and AI/ML support. Notable examples include RIC Testing as a Platform (RIC-TaaP), a collaboration with Orange that advances xApp/rApp design and testing, and an OAM solution for Distributed RAN, showcased at India Mobile Congress 2024, enhancing real-time network management.

- **J Release:** The J release delivered significant advancements, including:
  - Improved integration and collaboration with OAI.
  - Enhanced rApp Manager and Service Manager with new sample rApps.
  - Introduction of a Python-based O1 Simulator and topology generator.
  - AI/ML framework updates with Kubeflow integration and R1AP v6.0 support.
- **K Release:** Marking the community's December milestone, the K release built on this progress with:
  - New AI/ML APIs for model management, along with retraining pipelines and SDKs for feature and model storage.
  - Kubernetes operators for RIC deployment and OKD O-Cloud bare-metal support.
  - Enhanced xApp support and improved integration between O-RAN SC DU and OAI components.

“These releases underscore the power of collaboration within the O-RAN SC,” said David Kinsey, Expert Member of Technical Staff, AT&T and Co-Chair for the O-RAN Software Community. “In alignment with the O-RAN ALLIANCE, the O-RAN SC addresses real-world challenges and delivers solutions that advance the adoption of open-source technologies in telecommunications.”

Looking Ahead

The O-RAN SC will continue to prioritize innovation and collaboration in 2025, focusing on key advancements expected in the upcoming L release. These include the introduction of a new simulator, the development of additional xApps, enhancements to the AI/ML framework, and improved integration between the O-RAN SC O-DU and OAI. The community remains committed to expanding deployment use cases, refining technical documentation, and fostering deeper engagement within the telecommunications and open-source communities.

To learn more about O-RAN SC and the J and K releases, as well as what the community has contributed in earlier releases, visit www.o-ran-sc.org.

About the Linux Foundation

The Linux Foundation is the world’s leading home for collaboration on open-source software, hardware, standards, and data. Linux Foundation projects are critical to the world’s infrastructure including Linux, Kubernetes, Node.js, ONAP, OpenChain, OpenSSF, PyTorch, RISC-V, SPDX, Zephyr, and more. The Linux Foundation focuses on leveraging best practices and addressing the needs of contributors, users, and solution providers to create sustainable models for open collaboration. For more information, please visit us at linuxfoundation.org. Linux is a registered trademark of Linus Torvalds.

About O-RAN ALLIANCE

The O-RAN ALLIANCE is a world-wide community of mobile operators, vendors, and research & academic institutions operating in the Radio Access Network (RAN) industry. As the RAN is an essential part of any mobile network, the O-RAN ALLIANCE's mission is to re-shape the industry towards more intelligent, open, virtualized and fully interoperable mobile networks. The new O-RAN specifications enable a more competitive and vibrant RAN supplier ecosystem with faster innovation to improve user experience. O-RAN based mobile networks at the same time improve the efficiency of RAN deployments as well as operations by mobile operators. To achieve this, the O-RAN ALLIANCE publishes new RAN specifications, releases open software for the RAN, and supports its members in integration and testing of their implementations.
For more information, please visit www.o-ran.org.

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