O-RAN ALLIANCE Announces 52 New Specifications, 6th Release of Open Software for the RAN "F", and First O-RAN Certificates

- 52 O-RAN specifications published since March 2022
- 6th release of open software for the RAN – "F" – delivered by the O-RAN Software Community
- 1st Certificates awarded in the O-RAN Certification and Badging Program by Asian OTICs

Bonn/Germany, July 14, 2022

52 O-RAN Specifications Published since March 2022

O-RAN ALLIANCE has published a new set of 52 specifications for open and intelligent RAN, as the first batch of the O-RAN Release 003 specifications. Among them there are 12 new titles including use cases for Massive MIMO and the R1 interface, E2 interface testing, O2dms interface, Acceleration Abstraction Layer, outdoor macro cell HW, and security specification of 3 different parts of the O-RAN Architecture.

"The O-RAN ALLIANCE has always taken security very seriously. We have recently converted the Security Focus Group into O-RAN's 11th technical Work Group to allow even more intensive specification efforts in the field of security," said Andre Fuetsch, Chairman of the O-RAN ALLIANCE and Chief Technology Officer of AT&T. "Security experts from the O-RAN ecosystem have been applying systematic threat analysis on different components of the O-RAN Architecture. Security is becoming an integral part of individual interface or function specifications and there is a security testing specification for proper verification. A systematic and transparent approach to security by the broad O-RAN ecosystem follows best practices seen in other parts of the network to ensure the best possible, most secure solutions."

Another 40 technical documents have been updated with extensions and new features.
To learn more about the new and updated specifications, please read our web announcement. To access the O-RAN specifications, please visit our website.

6th Release of Open Software for the RAN – "F" – Delivered by the O-RAN Software Community

In June 2022, following on the half year release cycle, the O-RAN Software Community (OSC) published its 6th open software release dubbed "F". The F Release continues to improve the support for Traffic Steering and Network Slicing use cases, as well as the alignment with the latest O-RAN specifications.
Main features of the F release include:

- For O-Cloud, the OSC O-CLOUD platform implemented O2 DMS and IMS, and support of 3 types of resource pools (SIMPLEX, DUPLEX, and DUPLEX +) according to the O-RAN O-CLOUD specification
- For Intelligence, the F release delivered:
  - Implementation of A1-Policy & A1-EI functions according to O-RAN specifications
  - Initial R1 interface support such as Data Management Exposure
  - Update of the Near-RT RIC to support E2AP specification v2.0
  - xApp framework for Python with support of the REST-based interface for E2 subscriptions
- For the radio protocol, new features include Intra-CU handover, Idle Mode Paging and HARQ framework in a new version

- The Service Management and Orchestration (SMO) added its management enhancement by supporting the Standard Defined Messages (StdDefine) over the O1/VES interface, while developing the framework for Network Slicing, and support for the O2 interface
- Tools and functions to provide the O-RAN deployment topology view for rApp and CNF deployment

"Congratulations to the team for continuously progressing at the pace of 2-release cycle per year since its inception in 2019," said Chih-Lin I, co-chair of O-RAN Technical Steering Committee, and Chief Scientist from China Mobile. "One of the key highlights from F release is the implementation of the O-CLOUD with multiple resources, which becomes the steppingstone to Service Management and Orchestration (SMO) xNF deployment for the G release."

“Ericsson continues to actively engage in the O-RAN ALLIANCE and O-RAN Software Community”, said Per Beming, VP Head of Standard & Industry Initiatives at Ericsson. “We recognise the potential for an ecosystem of multi-vendor rApps which support service providers in deploying, evolving, optimizing and automatically healing the RAN. We imagine a world in which simple multi-vendor rApps are used to build complex use cases and recognize the importance of the R1 interface in enabling this vision. As the main contributor to the Non-Realtime RIC project in OSC F release, Ericsson has focused on the challenges involved in exposing services over the R1 interface, in addition to elaborating an approach to rApp life cycle management.”

To deep-dive into the F release and to get the open software, please visit the O-RAN Software Community website.

1st Certificates Awarded in the O-RAN Certification and Badging Program by Asian OTICs

The first two O-RAN Certificates have been awarded, validating the establishment of the O-RAN Certification and Badging Program.
O-RAN ALLIANCE announced its Certification and Badging Program in June 2022, in cooperation with Open Testing and Integration Centers (OTIC). O-RAN Certification and Badging Program represents a comprehensive mechanism ensuring confidence in O-RAN solutions within the industry.
O-RAN certificates state that an equipment or function is conformant to O-RAN specifications, whereas O-RAN badges confirm interoperability or end-to-end functionality of an O-RAN solution.
O-RAN ALLIANCE maintains a **Catalogue of O-RAN Certificates and Badges** at its website.

The Asia & Pacific Open Test and Integration Center (OTIC) in China PRC issued the O-RAN Conformance Certification at the end of June 2022. The certification was awarded to an O-RU that fully meets the O-RAN WG4 Open Fronthaul (OFH) technical specifications, including the Control, User, and Synchronization plane (CUS-Plane) and the Management-plane (M-Plane). The complete process consisted of two phases, namely the pre-tests and the official verification, with all 31 test cases verified and passed.
Another O-RAN RU certification testing took place in the Auray OTIC and Security Lab. During the O-RAN Global PlugFest Spring 2022, the OTIC completed OFH conformance certification by conducting the required tests following the process and procedure specified by the O-RAN ALLIANCE. Auray OTIC and Security Lab also obtained TAF ISO/IEC 17025 approval for O-RAN test specifications and follows ISO/IEC 17065 to add independent peer viewer procedure.
Both awarded RUs are ready for commercial deployment for Tier one and other operators.

Upon approval by the O-RAN ALLIANCE, each OTIC provides collaborative, open, and impartial working environment to ensure consistency and quality of testing of O-RAN products and solutions.

All approved OTICs are fully ready to support the O-RAN Certification and Badging Program. Companies that want to apply for O-RAN Certificate or Badge may choose to contact any OTIC according to its specialization or region. Visit our website to see all available OTICs.

About O-RAN ALLIANCE

The O-RAN ALLIANCE is a world-wide community of more than 340 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 the 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.

For more information, contact:

O-RAN ALLIANCE PR Contact

Zbynek Dalecky
pr@o-ran.org
O-RAN ALLIANCE e.V.
Buschkauler Weg 27
53347 Alfter/Germany