

ASSET Radio



ASSET Radio planning tools provide accurate RF coverage, capacity, cell parameter, and neighbor planning for cellular networks.

A network plan is never static. As traffic grows and moves, a network's design needs tweaking; plugging coverage holes and adding capacity where required. Additionally, new technologies such as 5G need to be deployed on top of existing networks in the most efficient and cost-effective manner possible. This requires careful planning, especially when technology layers are expected to work together as a seamless network.

ASSET is a 3GPP compliant software product for planning multi- technology wireless networks across GSM, UMTS, LTE, 5G and more, all within a single project.

It supports traditional, vRAN, C-RAN and Open RAN architectures from all equipment vendors. ASSET Radio can be customized through a range of productivity packs, with additional functionality to meet your needs.

Along with 2G, 3G and 4G support, ASSET has been a fully capable 5G radio planning tool since 2018. 5G NR modeling with advanced propagation models, complex antenna arrays and full multitechnology 3D coverage and capacity simulations are all supported.



Aircom is a leading provider of network engineering tools.





Deliver a cost effective, high performance network

The migration to new technologies and architectures such as Open RAN presents considerable challenges. ASSET Radio provides comprehensive coverage, capacity, cell parameter and neighbor planning capabilities for any network technology. 3GPP compliant modeling of carriers, bearers, services, and terminal types is supported, as are TDD and FDD network modes, along with technologies such as VoLTE and NB-IoT.



Integrate with 3rd party tools and automate business processes.

Radio network planning is no longer a standalone business activity; planning tools need to connect to the wider business to leverage the vast amounts of valuable data required to create better network plans. A suite of robust APIs allows ASSET to integrate with other systems, including inventory, site acquisition, site rollout, configuration management, and performance management. This enables automation that significantly improves radio network planning accuracy and network performance.



Validate new business cases and plan 5G networks.

ASSET delivers all the radio planning capabilities you need to design the best 5G network possible. Validate 5G business cases and technology decisions. Reduce time-to-market and maximize revenue potential with sound roll-out plans. Reduce pressure on design teams with highly efficient planning and design optimization capabilities. Validate propagation models to ensure a successful deployment and maintain QoS by successfully integrating 5G into existing network technologies.

ASSET Radio is a part of aircom's ASSET Suite, a comprehensive planning portfolio designed to deliver cost-effective high-performance networks.

The ASSET Suite consists of the following products:



ASSET Radio

Radio network planning. Coverage, capacity, cell parameter and neighbor planning for wireless networks.



ASSET Backhaul

Wireless backhaul planning. Microwave link planning, path profiling and frequency interference analysis.



ASSET Design

Automated network design. Automated optimization of existing cell configurations, as well as the placement of new sites.



ASSET Web

Web UI for planning tasks. A lightweight and fast workflow-based UI for common planning tasks.



ASSET Update

Planning tool update. Update ASSET with actual network configuration settings to enable planning from a valid baseline.



Geolocated usage maps. Enables more accurate radio network planning and network design optimization. Hyper-accurate coverage predictions have become critical for network planning, especially at higher frequencies.

ASSET Radio helps ensure accuracy, every time.



Landscan Population Maps

LandScan[™] is the finest resolution global population distribution data available and is well suited to the needs of CSPs due to the smart modeling approach employed to disaggregate census data. Aircom processes LandScan[™] data to make it usable in ASSET Radio. This data is invaluable for network expansion budgeting and planning and ensures accurate population-covered statistics for regulatory and marketing purposes.



3D Building Vector Data

Building vector data is a useful addition for more accurate LTE planning but is mandatory for 5G, especially where millimeter wave frequencies are concerned. Aircom's innovative approach to 3D building data creation results in a dataset with exceptional accuracy. ASSET's support for 3D predictions, 3D traffic spreading and 3D simulations ensure highly accurate network modelling.



Advanced Propagation Modeling

Advanced propagation models improve the accuracy of predictions, providing support for 3D building vector data support, mmWave frequency support and multipath and reflection modeling. This is critical for 5G planning. ASSET supports both the MYRIAD and Volcano models.



Aircom is a leading provider of RAN analytics, design, and optimization solutions to communication service providers worldwide.

Aircom is a brand that you have known and loved for many years, now backed by the financial strength of TEOCO.

For over 25 years, aircom has enabled mobile operators to automate how they plan, configure, and optimize their networks. This is even more critical when dealing with complex services like fixed wireless access (FWA), 5G standalone, private networks, and IoT, where everything needs to work in harmony to deliver a supreme customer experience. Through advanced analytics, our products provide actionable and measurable insights into network and customer behavior.

Cutting-edge products and services.

Market-leading solutions for addressing today's complex RAN environments.

Innovation is in our DNA.

We have the latest AI/ML-powered algorithms, automation, and new services to revolutionize your RAN.

Trusted by the world's leading service providers.

With 125+ customers in 100+ countries, we have the knowledge and experience you're looking for.

With decades of experience and a customer list that spans the globe, aircom helps its customers improve service quality, resolve network challenges, automate processes, and establish a competitive edge.

