



# ANTS - Automatic Network Test System

Drive Test



 **ants**  
*are everywhere*



# ANTS Drive Test

Mobile services: support network transformation with optimization and benchmarking ...

ANTS DT is the Drive Test application of ANTS fully integrated with all other ANTS applications, available for optimization and benchmarking based on android smartphones.

The offer from Telecom Operators and Service Providers is today enriched with more and more services supported by the new available access technologies including 5G and FWA based on 5G.

At the same time a re-organization of radio spectrum and allocated bands is ongoing to optimize older technologies including 4G+, 3G and 2G.

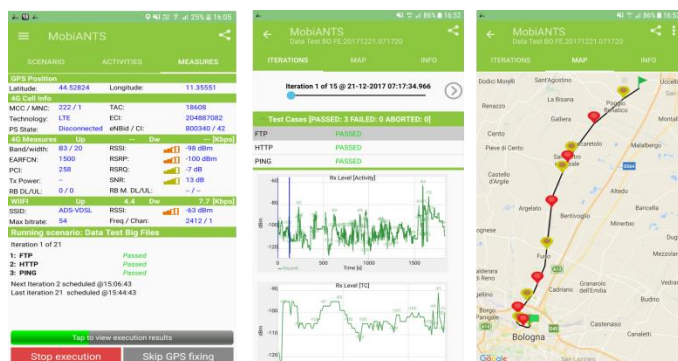
In addition, a strong monitoring process for operational cost control and compression is mandatory.

In such a scenario, Quality of Service (QoS) management has become mission-critical for network operations that must meet stringent QoS targets and Service Level Agreements (SLAs) on an ever-expanding portfolio. Quality of Service is a consolidated indicator that is closely related to customer preferences, particularly in the business segment.

ANTS Drive Test solution can play an integral role in overcoming this challenge, being powerful to handle complex services and access networks scenarios while at the same time agile enough to adapt rapidly to new services offerings.

ANTS DT is based on the MobiANTS App. Smartphones can be organized in units with up to 12 synchronized devices each. A tablet console is available to control the test campaigns. Just one click is needed to start or stop executions.

In addition each smartphone can be used as a stand-alone measurement tool with its own user interface. The measurements performed can be viewed directly on the smartphone as statistics, graphs or on geographical maps.



The solution is based on a unique integrated environment including Geo ANTS post processing tool allowing the users to autonomously create reports, dashboards and go deep inside the collected measurements.

## NETWORK OPTIMIZATION

The deployment of new 5G access and reorganization of other technologies like 4G+, 3G and 2G requires demanding network optimization and troubleshooting activities. To ensure high level quality of experience (QoE) and network performance, Drive Test tools need to offer reliable data collection and extensive drill-down capabilities.

## BENCHMARKING WITH COMPETITORS

Benchmarking against the competition is an effective way of measuring the gap or the advantage that a mobile network service has in a specific area. Benchmarking can also be performed among different technologies. When improvements are necessary and Operators have to address specific investments, a reliable and qualified tool like ANTS DT is mandatory to properly address any action.

## NETWORK MONITORING

Continuous optimization is a relevant part of network activities, particularly in today's times when networks have dynamic configurations.

The network capacity has to continuously change due to an ever-growing traffic demand and on different locations, network elements are regularly updated and coverage is extended.

Continuous optimization can be seen as a cyclic process involving data collection and data analytics.

Using ANTS and ANTS DT network performances and end-to-end services can be assessed and all the necessary data collected. The input are collected from various sources ranging from statistical counters generated in the network elements, to measurement data obtained during drive and walk tests.

Geo ANTS provides automatic data processing and analysis, resulting in accurate insights of the network. Based on these elements, corrections and network changes are proposed, decided and implemented.

## ANTS DT FEATURES

The tool, in a backpack version, can be used for Indoor & Outdoor measurements configured with 1x Tablet, 12x test terminals, 1x RF scanner with relative antennas, 1x GPS, internal battery pack.

- User will operate and control multiple devices through a single interface.
- The UE'S are synchronized with the same Test Procedure if requested.
- Measurements are shown in real time and stored in log files for later analysis.
- Each UE is provided with SW to be used also in standalone mode as a single and independent test tool.
- Real time network quality view is supported.
- Simultaneous measurement of UE and Scanner is supported.
- Metric calculation are in accordance with ETSI standard.

## FROM MEASUREMENTS TO ACTIONABLE PERFORMANCE INDICATORS

Test results are also available offline for many different interactive analyses using Geo ANTS dashboards to diagnose potential issues and produce reports that monitor the actual QoS performance against engagements.

## AGILITY & INDUSTRIALIZATION

ANTS provides both agility and industrialization on the testing process.

- ANTS DT extensive collaboration process enables capitalization and leverage of knowledge and expertise.
- ANTS DT highly modular test design approach allows for creating new service tests on a graphical user interface, launching ad-hoc tests instantaneously to accelerate a diagnostic, defining new KPI etc. ANTS DT supports users' day-to-day needs in a high speed business environment where a proactive service focus is key to survival.