



ANTS - Automatic Network Test System

Geo Ants



 **ants**
are everywhere



Geo ANTS

Mobile services: a competitive advantage in access network transformation ...

Geo ANTS is the Aubay designed application to support analysis and investigations from geo-referenced information for outdoor and indoor environments.

Geo ANTS can collect data from ANTS DT, other drive test systems or Apps, MDT and network counters. Fully integrated with all other ANTS applications, supports optimization and benchmarking activities. Any other data source can be easily added.

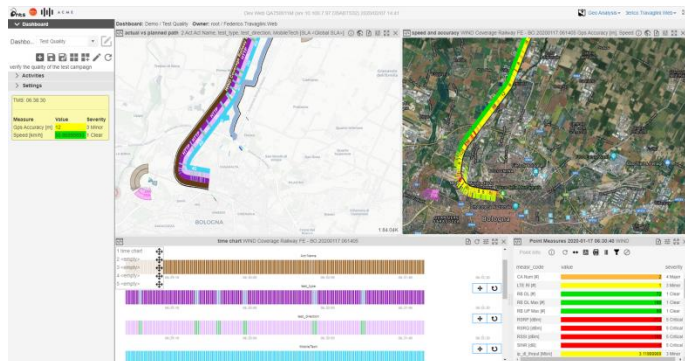
Today Network Operators deal with multiple technologies including now the 5G, different vendors and service layers within a unique mobile network. Engineering and Operation need a solution that can optimize both the network and the end-to-end subscriber experience. Geo ANTS analyzes, and optimizes RAN performance while at the same time troubleshoots issues and provides with a clear view of the subscriber experience thanks to its powerful network measurement-based analysis environment.

Extensive analytics capabilities provide insights across devices, subscribers, and locations.

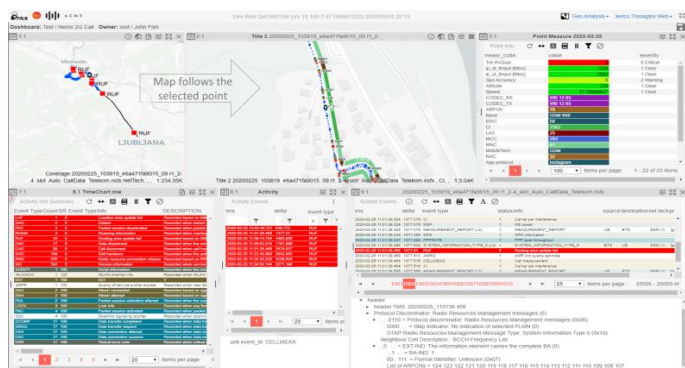
Geo ANTS supports in a unique full-web environment QoS/QoE analysis including voice calls with POLQA-MOS voice quality, OTT (YouTube, WhatsApp, ..), Ping, FTP, HTTP, iPerf. Geo ANTS offers support for all major wireless technologies, including 5G NR, NB-IoT, LTE-M, LTE-A CA, VoLTE/ViLTE, VoWiFi, and mMIMO in a real multi-user cooperative environment.

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

GEO ANTS dashboard supports path analysis for optimization and benchmarking with synchronized views.



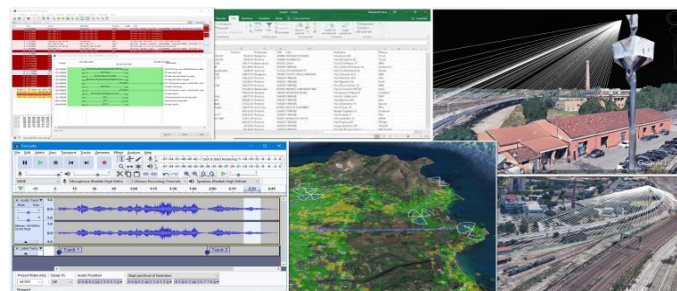
A rich set of views include log and trace files investigations down to single message decoding.



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, Analysis tools need to offer reliable data collection and extensive drill-down capabilities.

5G NR beams can be visualized on a 3D map to detect the attenuation of buildings and trees on the signal level and to evaluate beam width and coverage in real environment.



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. Geo ANTS benchmarking feature provides recommendations to improve performances and compares the network against local or global references.

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.

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.

GEO ANTS FEATURES

- Full-web cooperative application with no need for local component installation.
- Analysis of georeferenced data for benchmarking, trouble shooting, statistical analysis.
- Integrates different source of measures MobiANTS, fixed probes, third party tools, MDT, Network Counters.
- Storage, computation resources, user management are on server side.
- Open API to integrate with external systems
- User definable dashboards and reports based on synchronized views (map, trace, time chart, histogram, L3, audio...)
- SLA management to colors (from very bad to excellent areas)
- Activity Set to merge in the same analysis different test campaigns
- Cluster Area to aggregate KPIs geographically
- Antenna and cell import possibility
- MobiANTS Management application for controlling and supervising the MobiANTS fleet