



Service Assurance

MOBILE SERVICES: A COMPETITIVE ADVANTAGE, IF QUALITY AND RELIABILITY ARE GUARANTEED...

Accelerated market maturity and fierce competition have forced mobile operators to constantly develop new services such as video call, push e-mail and other mobile office functionalities for business users, as well as MMS-based infotainment and contents download/streaming for the large public.

In such a dynamic scenario, Quality of Service (QoS) management has become mission-critical for network operations who must meet stringent QoS targets and Service Level Agreements (SLAs) on an ever-expanding portfolio of services.

Automatic testing can play an integral role in overcoming this challenge however it must be powerful enough to handle complex services scenarios while at the same time agile enough to adapt rapidly to new services offerings.

ANTS UBIQUITOUS END-TO-END TESTING

The **ANTS for Service Assurance** end-to-end testing solution enables operators to verify the QoS delivered by their network and service infrastructure. **Tests are available from pre-built libraries or designed by users with ANTS graphical Test Procedure Editor** without needing knowledge of the infrastructure topology. With a few clicks, tests can be

instantaneously run or scheduled for a later date, once or periodically, on a subset of network elements and user profiles. The scheduling and resource management engine then seamlessly coordinates the execution across the Remote Test Units (RTU) deployed throughout the network.

- All call destinations (inbound, outbound) and services including video call, WAP/HTML navigation, contents download/streaming and IVR/VAS are supported on home and roaming networks (GSM, GPRS, Edge, UMTS, PSTN, etc.).
- In the Remote Test Units (RTU), **handset emulators and commercial handsets** – key for 3G systems – can be used to generate calls over the air and reproduce customers' real-life use conditions.
- Any user profile, including visitors in roaming areas, can be tested – simply choose pre-defined SIM categories when planning a test. The **centrally located SIM/USIMs will be virtually dispatched** to the appropriate RTU when required.

FROM MEASURES TO KEY PERFORMANCE INDICATORS

All measures defined in the ANTS Test Procedure Editor module are collected by RTUs during the test execution and forwarded instantaneously to the central test results repository enabling users to **monitor results in real-time:**

- The test progress is displayed on an animated flow chart, including the measures collected (check points, counters, timers) and traces generated
 - **Standard and user-defined Key Performance/Quality Indicators (KPI/KQI)** are based on pre-determined measures and reflect services availability, accuracy and speed
 - **Alarms** are raised when KPI/KQIs exceed specific preset thresholds
- Test results are also available offline for many different interactive analyses (OLAP) to diagnose potential issues and produce reports that monitor the actual QoS performance against engagements towards customers, partners (e.g. roaming partners), or regulatory authorities. Via the air interface, all Public Land Main Networks (PLMNs) accessible by the deployed RTUs can be tested, thereby supporting **competitive benchmarking**.

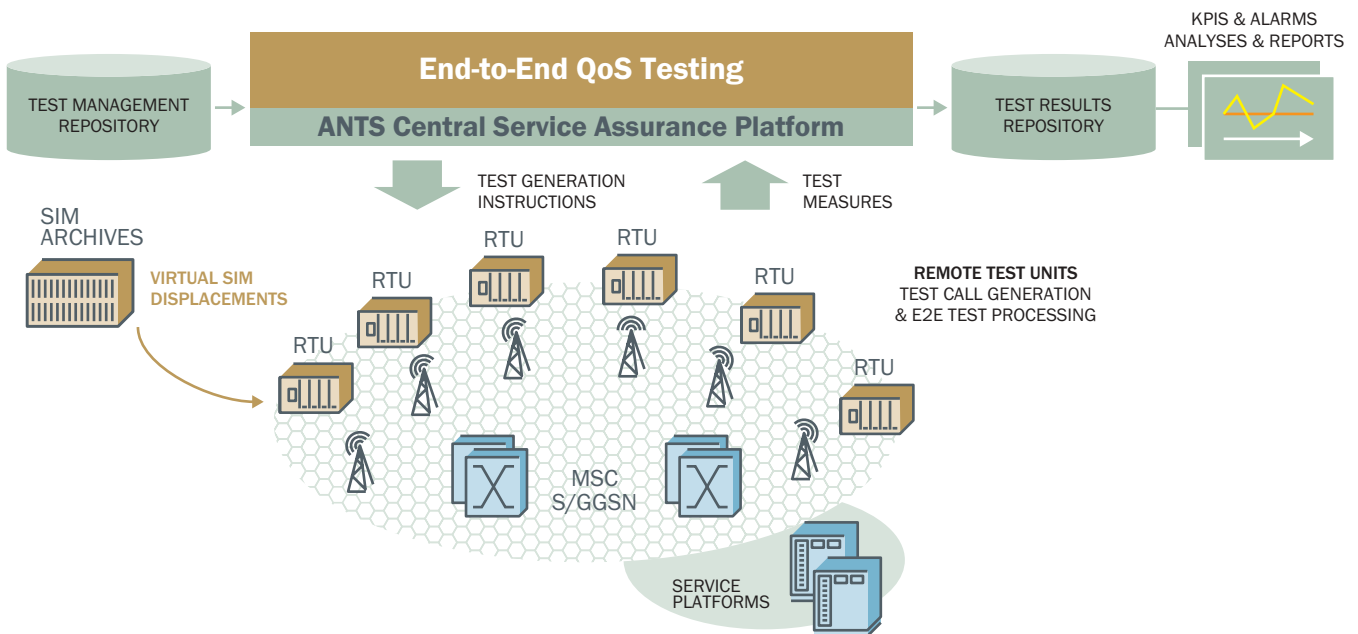
AGILITY & INDUSTRIALIZATION

Many alternatives provide either agility or industrialization. ANTS provides both:

- ANTS extensive **process automation** enables massive testing and real-time monitoring of QoS (24/7 Service Assurance). In addition, the test management repository module, combined with advanced user management, ensures capitalization and **leverage of knowledge** and expertise.
- ANTS highly modular test design approach allows for creating new service tests on-the-fly, changing test SIM cards without interrupting the test process, launching ad-hoc tests instantaneously to accelerate a diagnostic, defining new KPI/KQIs, etc. ANTS supports users' day-to-day needs in a high speed business environment where a proactive service focus is key to survival.

BENEFITS

- **“ZERO-HOLE” SERVICE ASSURANCE: ANY SERVICE, ANY NETWORK, ANY SIM, ANYWHERE**
- **MASS-TESTING CAPABILITIES THROUGH STREAMLINED SERVICE ASSURANCE OPERATIONS**
- **PREVENTION OR EARLY DETECTION OF ISSUES AND ASSISTED DIAGNOSIS FOR RAPID RESOLUTION**
- **SHORT TIME-TO-ASSURANCE FOR NEW SERVICES DEPLOYMENTS**



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