Smartviser

viSerNetwork Test Suite

Automated Solution for Network testing

viSerNetwork Test Suite brings a complete automation setup with an easy to deploy Standalone solution and a powerful web analytics dashboard to fit any customer testing needs.

Highlights

- Optimize your testing with an adopted reference tool by Telecom key players
- Get All in one solution to perform automated testing
- Get a fully scalable end to end Solution from test execution (repeatable and reflecting real usage up to an enhance analytics (comprehensive and detail report)
- Reduce testing time by 75% and achieve 40% ROI
- Get visualised data of the results in the interactive dashboard for true reflection of QoE

Top 5 Customer Cases

- VoLTE/VoWifi/5G launch readiness
- Network Performance
- Network Coverage
- Network Benchmark
- Network Roaming Performance

Testing Use Cases

1. VoLTE / VoWiFi testing

Many operators across the world are continuously investing in Voice over WiFi (VoWiFi) and Voice over LTE (VoLTE) technologies as these will improve the voice experience, better connection time and better overall coverage and more importantly it is a necessary step to full IP network.

On top of that, Operators also need to ensure quality in a heterogenous network configuration mixing legacy (2G, 3G) technology with full IP technology.
VoWiFi allows users to make voice calls when there is no cellular network available or as an option when they are indoors.

The introduction of these new technologies has brought new challenges for testing and to ensure the Quality of Experience the following items need to be thoroughly tested and ensure no degradation in the service:

- Audio Quality MO/MT
- Call set up time
- Call connection rates
- Call drop rates
- Battery life impact
- Call interoperability
- No audio MO or MT

2. Network Performance

Get a true picture of network performance. You can test on real conditions using any device. You can get instant results on web browser loading fluidity in static and mobile conditions with available RAT 2G, 3G, 4G.
It also allows to test file transfer performance both HTTP and FTP in any testing environment static or mobile.

Similarly, you can test streaming performance using You-Tube or other similar service to evaluate KPIs like buffering time and access time.
WiFi hot spots performance is also part of the Network performance testing.

3. Network Coverage

Network coverage can be a source of many customer complaints and can affect the customer loyalty. Smartviser allows you to quickly identify the coverage, the reachability and white areas of no service in a plotted map to help identify these issues.

It also allows to get an overview of the RAT coverage 2G, 3G, 4G and handovers between each RAT.
Testing can be covered in a variety of conditions, static, field testing, and in high speed conditions (train).

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4. Device Performance Testing

Network benchmarking is an activity that is regularly carried out by regulators and ranking media. Easily compare against key competitors MNOs or MVNOs and benchmark information regarding RAT split, coverage, data performance call performance, audio performance and many more.

Measure network benchmark on real world conditions with real devices (any device).

5. Network Roaming Performance

viSerNetwork test Suite allows MNOs to test roaming performance using real networks and devices. You can remotely manage the testing of strategically located devices of your choice in different locations across the world and initiate tests to check the roaming performance remotely.
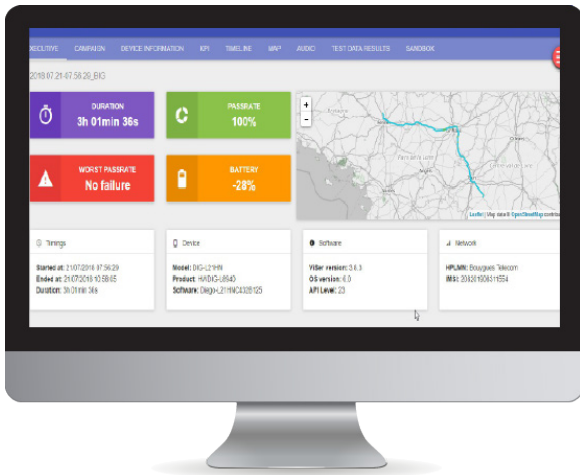
All aspects of roaming traffic, which can include MO/MT voice, SMS and data can be monitored and analysed, with real-time reporting capabilities available from the interactive dashboard.

6. Prepare for 5G launch

5G is a technology that will be available very soon in 2019 by several networks. In preparation for the launch of a new service SmartViser can allow performance test on 5G network infrastructure.

Track and monitor key KPIs on data performance and voice performance and especially get a focus on the latency.

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The viSerNetwork Key Metrics

- Success rate of each test case
- Mapping of the performance
- Detail KPIs (100+) per domain, i.e.:
  * Call establishment time,
  * FR2LTE, CSFB, MOS,
  * Data Throughput, loading time
  * Latency

Setup

viSerNetwork test Suite is a fully scalable solution able to fit any customer needs. Providing turnkey solution based on viSer (Virtual User) App can be enhanced with the powerful "companion" hardware products to set up a full automated test environment.

- viSer is the standalone APK able to execute test scenario and monitor KPI for instant repor
  * viSer can be provided with Reference scenario based on SmartViser library (Voice, Data, coverage and reachability …)
  * viSer can be easily used as DIY allowing test engineers to create their own test scenario thanks to a simple interface for scenario creation (or Smartviser can do it for you)
- viSer Test Suite brings also optional testing solution for any customer test setup for instance:
  * The SmartBoard able to control 10 SIM card connected to one Device for Multinetwork testing
  * The viSer Audio MOS setup for an automated and standalone Audio speech quality scoring

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viSerNetwork

viSerNetwork Test suite and especially the powerful viSer application allows you to

- **Execute testing by real usage execution:**
  * parallel
  * sequential
  * random

- **Trigger your test execution on specific events:**
  * Time
  * % battery
  * RAT change
  * Cell ID
  * GPS Location

- **Get consistent Metrics on VWS the web Dashboard (ViSer Web Services):**
  * Statistic
  * Time-lines
  * Sandbox
  * Plotted results
  * Comparison dashboard

SUMMARY

- **Automated**

Standalone

Repeatable

24/7 operation

Choice of devices

- **Scalable**

From one to unlimited number of devices

Allowing to run pre embedded test script up to specific test scenario design

- **Easy to use and to deploy**

Same script on any different devices (Brand agnostic)

Launch synchronized testing on multiple devices

- **Key Metrics on comprehensible report**

Full coverage on end user functions

Instant results on rich dashboard