

MultiDSL A - Voice & Audio Performance Assessment

The MultiDSL A test system for speech quality (MOS) evaluation helps operators, device manufacturers, and chipset vendors better understand and enhance user satisfaction.

Poor-quality voice communication systems can severely impact both corporate image and customer satisfaction. While subjective speech quality assessments may provide insights, they are often inconsistent and unreliable when done poorly, and costly and time-consuming when performed correctly.

The MultiDSL A system leverages advanced objective measurement technologies, empowering users to efficiently manage and improve Quality of Service (QoS). Backed by Opale Systems' trusted expertise, MultiDSL A delivers a versatile solution that combines powerful, network-wide testing capabilities with intuitive management tools for streamlined operation.

At a glance...

Quality Of Experience

Delivers true and objective Voice quality perceived by end users

Universal

unparalleled interoperability allows you to test any communication system : analog, satellite, cellular, TDM, Push to talk, and many other

Test design flexibility

Automation engine enables to create any test you need.

Your imagination is your only limit.

Smart analytics

Advanced metrics help you determine and visualize root cause for Voice performance degradation

Seamless Integration

Comprehensive API enables you to automate MultiDSL A from anywhere, by any application, at any level.

Modular and scalable Architecture

Expand as you need



Making the difference

Whether you need to test a single call between two smartphones, or set up a complex automated test schedule, MultiDSLAs help you make the difference for your customers.

Network-Wide Testing

call performance between any end points

Trustful and accurate

measurements are based on latest international standards

Scalable Architecture

makes it usable from the Lab environment to Enterprise Network Operations

Management by Exception

report generation allows management by exception

In-Depth Analysis

drill-down and detailed graphical metrics help resolve problems quickly

SLA Verification

scheduled tests allow long term analysis

Ease of Use

simple and intuitive user interface helps you make the job faster

Flexibility

local and remote operation offers additional flexibility and reduced head-count

Reduced Engineering Time

automation reduces regression testing time

Observability

Service/site monitoring in 24/7 with essential metrics/kpis



LAB

- Interactive test creation
- Fully flexible test design
- Highest accuracy
- Extensive analysis
- Immediate feedback
- Scenario testing
- Test automation



Enterprise

- Management Reports
- Unattended operation
- Small learning curve
- Alerts on problem
- Standard tests
- Scalable and modular



Network

- NMS integration
- Central scheduling
- Central maintenance
- Multi-tier user support
- Quick and easy to use
- Web reports



Field Test

- GPS for location and synchronisation
- Low power requirement
- Interface to cell phones
- Post-process mapping



Manufacturing

- Repeatable testing
- No training to run a test
- Database of all tests
- End of day reports
- Python, Rest API support for automation



Analog Nodes

The Digital Speech Level Analyser (DSLAs) is available from two-node desktop package up to six-node rack-mount alternatives. DSLA firmware includes a sophisticated range of signal generation and measurement tools.

Use DSLA to include smartphones, Bluetooth devices, POTS phone lines, sound cards and PTT radio terminals in your tests.

VoIP Nodes

The VoxPort Packet (VPP) family of software nodes includes options for lab-based and network-wide testing of VoIP and VoLTE performance, with or without built-in RTP packet impairment.

Use VPP to generate real voice calls over a VoIP network. Optional built-in packet impairment generation and managed codec rate changes make VoxPort Packet+ a simple and effective way to understand, manage and even reproduce VoIP network behaviour.

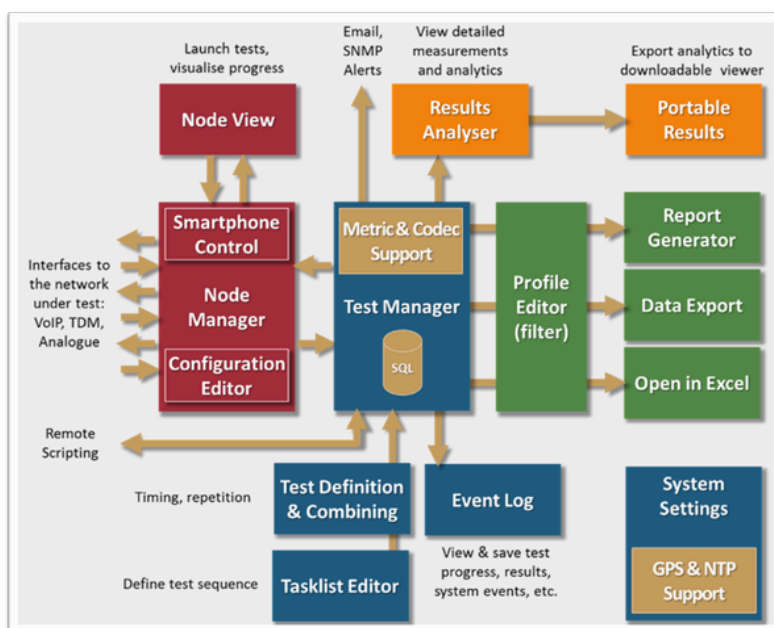
JSON and BSON exports

JSON and BSON exports allow to export MultiDSLAs metrics to an Elastic or MongoDB datastore for 24/7 observability

Build your own dashboards based on MultiDSLAs metrics or access dashboards to gain visibility, root cause analysis, extended KPIs from MultiDSLAs software

MultiDSLAs Controller

The MultiDSLAs Controller is the core of every MultiDSLAs configuration, managing the entire test process and storing settings and results in an SQL database.



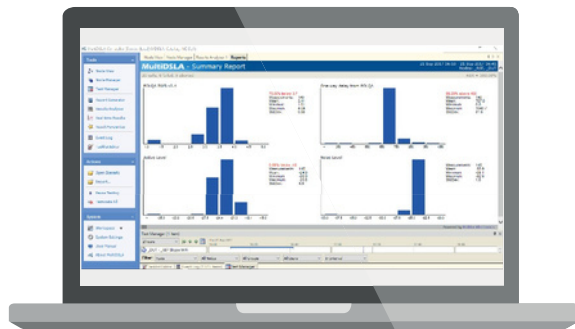
MultiDSLAs Controller provides the tools to optimise testing and verify the validity of POLQA and PESQ scores. As one MultiDSLAs user said:



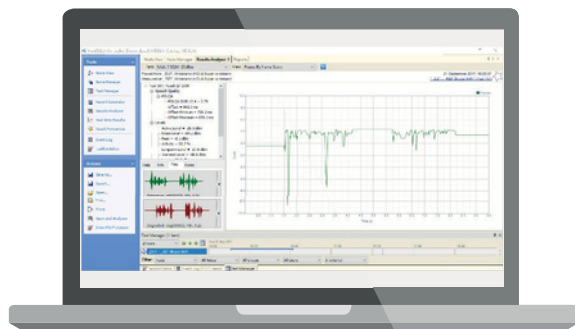
When I first acquired my MultiDSLAs system, I didn't know much about MOS (Mean Opinion Score), so I decided to run some tests. I quickly realized that MOS isn't like measuring volts—you can't simply connect a meter and take a reading. Factors such as the choice of speech material, speech power levels, signal filtering, and the performance stability of the system under test all play critical roles in setting up an accurate measurement process. Fortunately, MultiDSLAs simplifies this entire workflow, allowing you to easily configure, document, and store test settings to ensure both accuracy and repeatability. And the best part? It works.



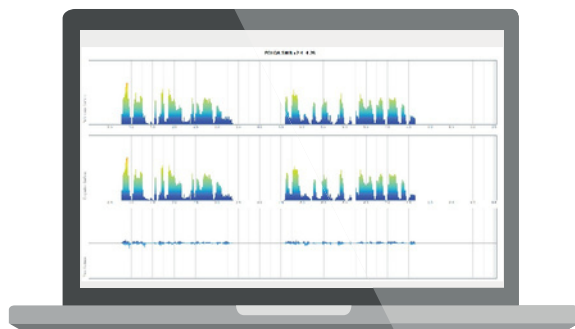
On-screen Report



Error localization



Visualization with playback



Detailed analytics



Tests

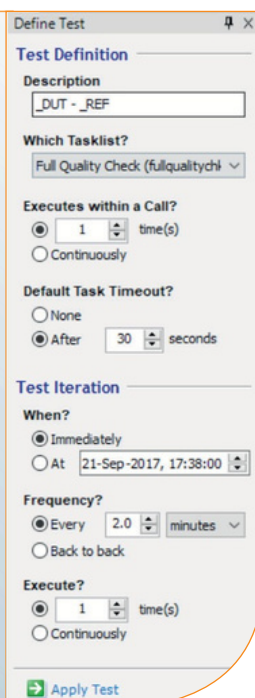
Managing and Planning Tests

Immediate tests + Regular tests + Scheduled tests+ Automated tests

Tests how and when you need them

Creating New Tests

If the pre-defined tests do not meet your needs, simply edit to adapt them, using a palette of Measurement, Sound, Timing and Control events.



Define Test

Test Definition

Description:

Which Tasklist?:

Executes within a Call?

☒ 1 time(s)

☐ Continuously

Default Task Timeout?

☐ None

☒ After 30 seconds

Test Iteration

When?

☒ Immediately

☐ At 21-Sep-2017, 17:38:00

Frequency?

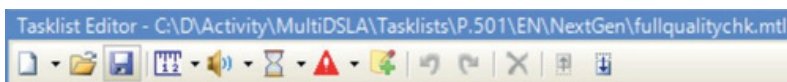
☒ Every 2.0 minutes

☐ Back to back

Execute?

☒ 1 time(s)

☐ Continuously



Results

- Display Numerical and Analytical data
- Results sharing
- Export
- Statistical analysis
- Report options
- Drill-down to root cause
- Verify thresholds
- Trigger alerts

