MultiDSLA - Voice & Audio Performance Assessment

The MultiDSLA test system for speech quality (MOS) evaluation helps by leading operators, terminal and network equipment manufacturers, chipset vendors and enterprises to understand and enhance user satisfaction.

Voice communications systems delivering poor quality of service can have a significant negative impact on corporate image, and customer satisfaction.

Subjective methods of measuring speech quality, if done poorly, lead to inaccurate and unrepeatable results and if done well are both expensive and time-consuming.

MultiDSLA uses objective measurement technology to enable the user to manage Quality of Service, powerfully and effectively.

Trusted Opale measurement know-how is delivered in a versatile system which combines powerful network-wide testing with simple to use management tools.

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.
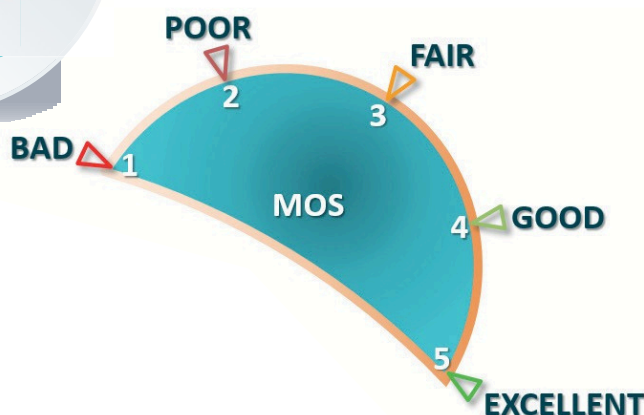Your imagination is your only limit.

Smart analytics
Advanced metrics help you determine and visualize roort cause for Voice performance degradation

Seamless Integration
Comprehensive API enables you to automate MultiDSLA 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, MultiDSLA helps 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 Analy- ser (DSLA) is available in a two-node desktop package, with four- and 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.
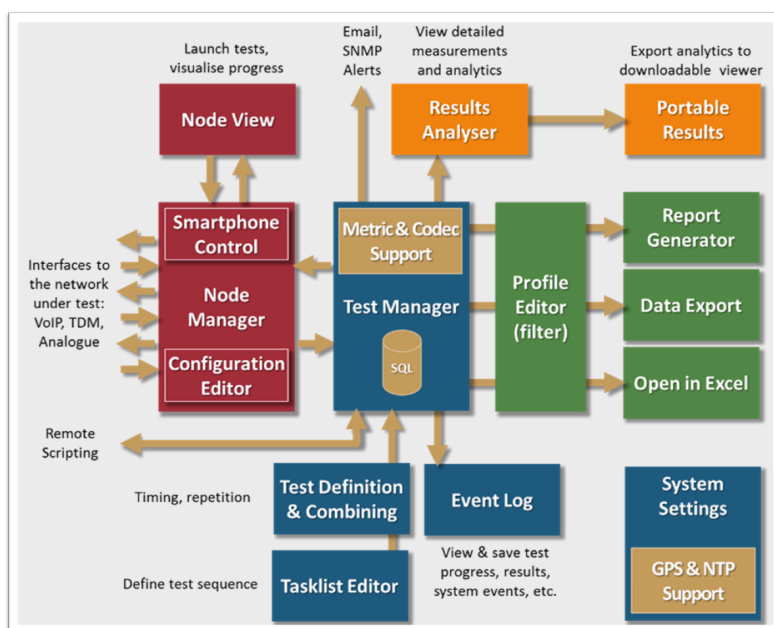
Use VPP to generate real voice calls over a VoIP network. Optional built-in packet impairment generation and managed codec rate changes make VoxPort Packet+ a simple and effective way to understand, manage and even reproduce VoIP network behaviour.

JSON and BSON exports

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

Build your own dashboards based on MultiDSLA metrics or subscribe to VQMaaS - to gain visibility, root cause analysis, extended KPIs from MultiDSLA software

MultiDSLA Controller

The MultiDSLA Controller is at the heart of each MultiDSLA cofiguration: it manages the test process and stores settings and results in an SQL database

MultiDSLA Controller provides the tools to optimise testing and verify the vali- dity of POLQA and PESQ scores. As one MultiDSLA user said:

> "I didn't know much about MOS when I got my fi rst MultiDSLA system, so I decided to do some tests. I quickly learned that MOS is not like Volts – you can't just clip on a meter and measure it. The choice of speech material, the speech power level, signal fi ltering and the performance stability of the system under test are all factors which must be taken into account in setting up the test process. MultiDSLA makes it simple to do this, and to document and store those settings to ensure accuracy and repeatability.
> **It works.**"

opale systems

Tests

On-screen Report

Error localization

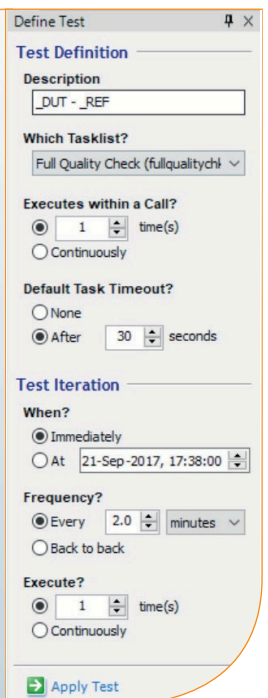### Visualizationwith playback

Detailed analytics

Managing and Planning Tests

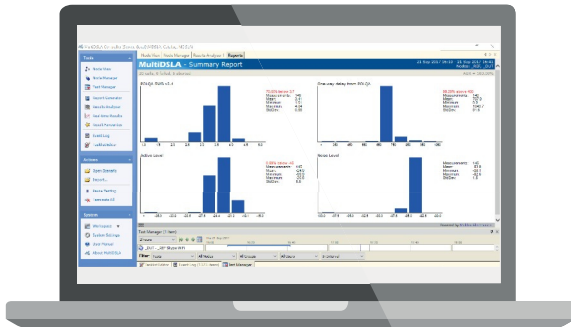Immediate tests + Regular tests + Scheduled tests+ Automated tests

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.
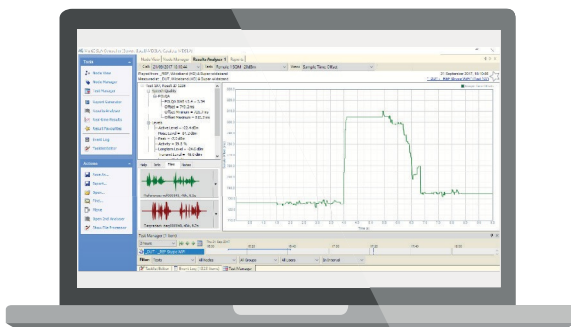
Define Test

Test Definition

Description
_DUT - _REF

Which Tasklist?
Full Quality Check (fullqualitychk)

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

→ Apply Test

Tasklist Editor - C:\D\Activity\MultiDSLA\Tasklists\P.501\EN\NextGen\fullqualitychk.mtl

Results

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