

Audio / Video Testing

Trusted by:



and others.

About Us

500+

ISTQB certified engineers

50+

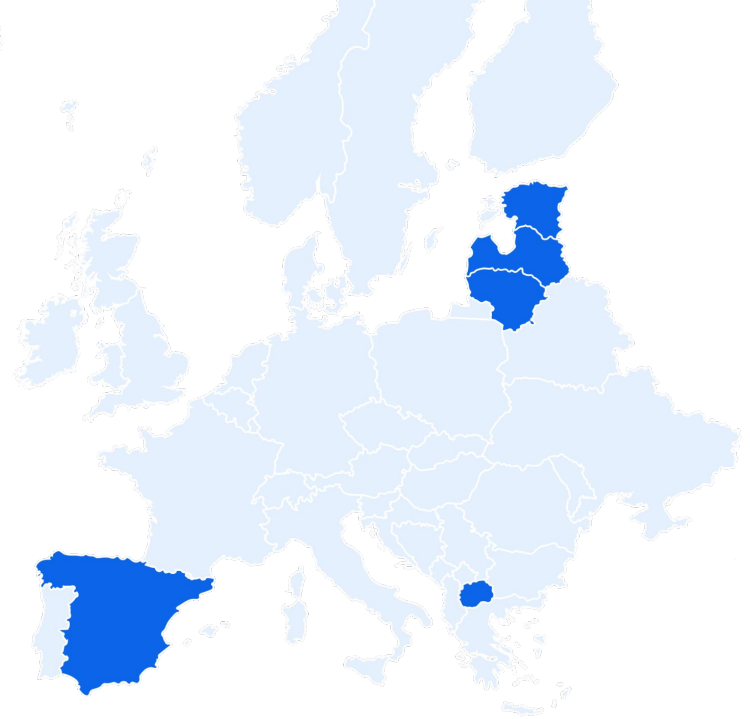
in A/V Department

12

years in business

4000+

physical devices



- ✓ Confidentiality and trust – ISO 27001 and ISO 9001
- ✓ Innovative testing laboratories for A/V testing, Performance testing, Battery testing, Network simulation
- ✓ Flexible engagements

TestDevLab Service Overview

With more than a decade of experience in the software quality assurance industry, we are able to cover a wide range of software testing services.

QA management

Manual testing

Security testing

Performance testing

Accessibility testing

UX testing services

Test automation

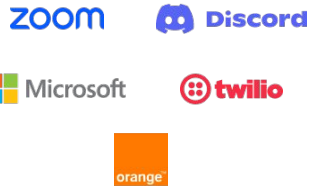
ISO advisory services

Competitive analysis &
benchmarking

Industries

We are proud to work with clients who have developed incredible software solutions that are used by billions of people worldwide—and we are honored to be a part of their success story.

Communications



Fintech & Banking



ISO



Healthcare



Travel & Hospitality



Security & Authentication



Hardware & IoT



Other



and others

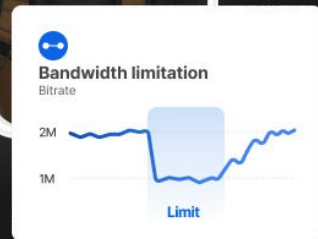
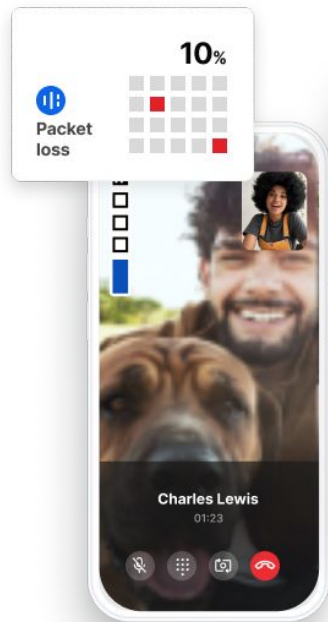
A/V Testing Capabilities: Overview

- **Audio/Video QoE testing:**
 - Manual & automation hybrid (complex)
 - Automation (regression)
 - Benchmarking Against Baseline / Competitors
- **Protocol and codec agnostic**
- **Variety of use cases:**
 - Screen Mirroring
 - Screen Sharing
 - Video conferencing
 - Streaming
- **Specific scenarios:**
 - Echo Cancellation
 - Noise Suppression
 - Virtual Background



Network Control Capabilities

- **Modified Access Points** - full control of network
 - Bandwidth limitation/Packet loss/Added Latency/Jitter etc.
 - Traffic shaping - Combinations of parameters
 - Change during the test
- **Real mobile network** - (2G/3G/4G/5G)
 - Provider side bitrate limitation - real world down/up ratio limitations
- **Field testing** - Mobile laboratory
 - While moving (changes in network on the road)
 - Any place with different coverage levels



Audio / Video Quality Metrics

Video

- **Full Reference** image quality assessment
 - Precisely tuned VMAF + PSNR & SSIM
- **No Reference** image quality assessment
 - VQTDL - deep learning MOS prediction
- **Subjective MOS** group of people mean opinion score 1-5
- **Frame rate** avg fps captured on receiver media
- **Freezes** duration, count, time between freezes, total, avg
- **Blurriness** score of blurriness intensity
- **Video delay** end-to-end delay from sender to receiver

Audio

- **Audio Quality**
 - POLQA/VISQOL voice quality MOS prediction
 - ASQ-VIT: No-Reference
- **Audio Delay** end-to-end delay

Other

- **Network Consumption**
- Audio Video **Sync**
- **CPU, GPU, RAM**

A/V products

ViQuLab

Standardized Testing Environment for Audio & Video Quality Testing (Black Box).

ViQuBox

SAAS tool used to process video, audio, and network test data from anywhere.

Tempero

Data visualization platform.

VQTDL

No reference video quality algorithm based on deep learning.

ASQ-ViT

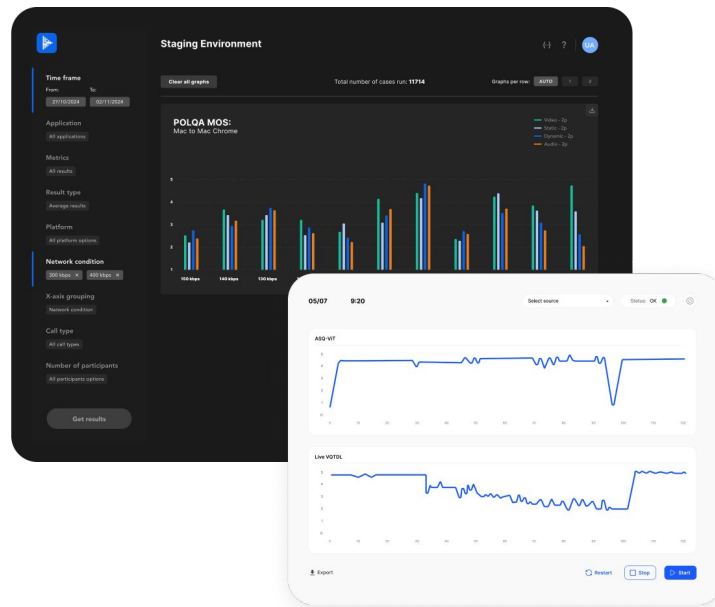
No reference audio quality algorithm based on spectrogram

LiveQ

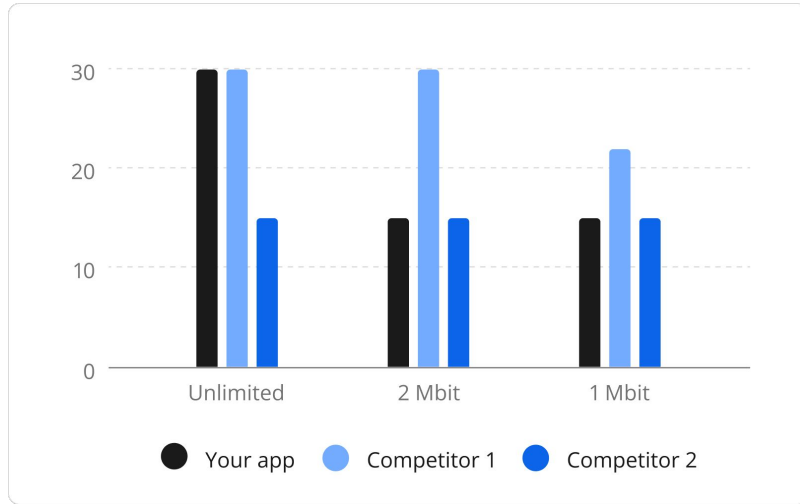
Audio & Video Testing with Live Reporting.

Test Results: Types of Reports

- **In-depth slide deck** reports including comprehensive findings and conclusions
- **Results Portal** for immediate visual overview of test results and trends
- **API** for raw time-series data with filtering and data structuring options
- **Excel sheets** with custom tables & graphs
- **Raw json** time-series data reports as files

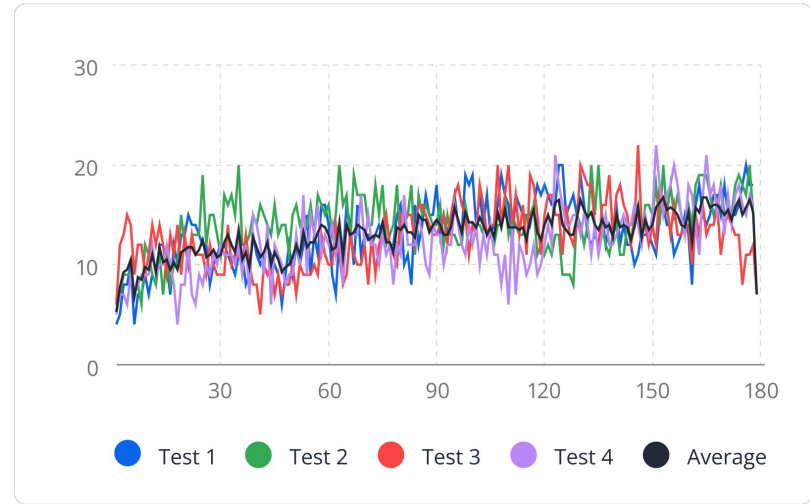


Test Results: Types of Data graphs



Averages

Average FPS - Unlimited



Over Time

[Desktop] [1Mbps] YourApp - Overtime FPS

Next steps

1

Pilot Project

Agree on limited testing scope and timelines of two to three weeks.

2

Testing Phase

Test data capture on desired competitor applications + your own, different network limitations and device combinations.

3

Reporting & decision

Final report with findings and in-depth analysis based on comprehensive testing of pilot scope. Decision to work as long term partners or on special SoW basis.

Read more



Audio & Video testing
blog:

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Benchmarking report
2022:

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Benchmarking report
2024:

[Read more](#)