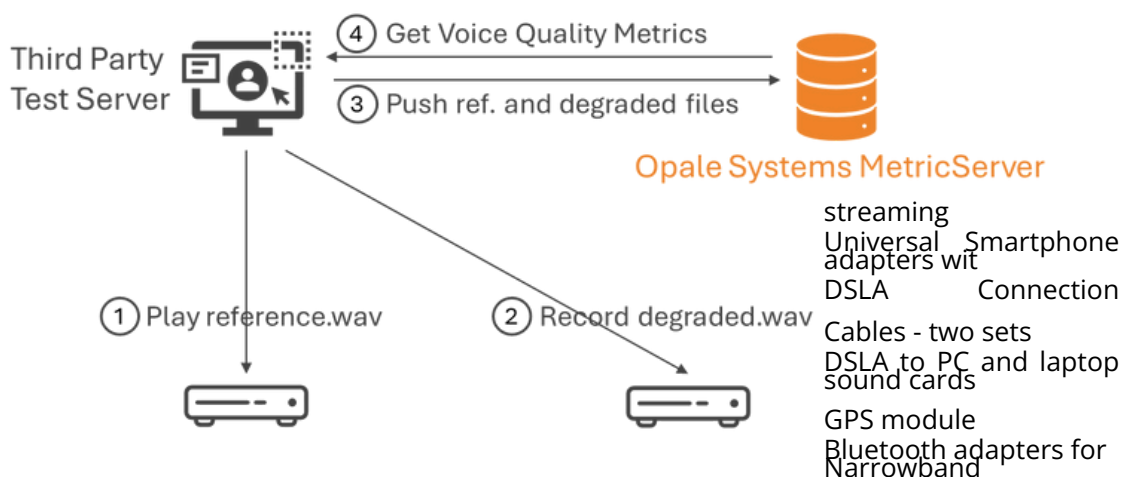


MetricServer

Opale Systems MetricServer processes speech file pairs through industry standard algorithms such as POLQA® to determine indicators of voice quality and audio experience, including of the Mean Opinion Score (MOS) estimation.



Speech performance expertise

MetricServer targets Service Providers, Integrators and Mobile Carriers who need to monitor Voice services metrics and Quality of Experience (QoE). Regardless of where degraded speech files are captured, Opale Systems' MetricServer is an easy-to-use scalable software that provides **Mean Opinion Score (MOS) and key voice quality indicators**.

Opale Systems' technology analyses degraded voice files signal in real time to extract detailed metrics and enable in-depth analysis of poor scoring results.

Easy Integration with 3rd Party App

Using the **platform-independent Python API**, MetricServer can be incorporated into any proprietary test system. Reference and degraded speech files are passed to MetricServer by the third-party software and results are returned in the same way or stored in a database.

Simple steps and a logical workflow

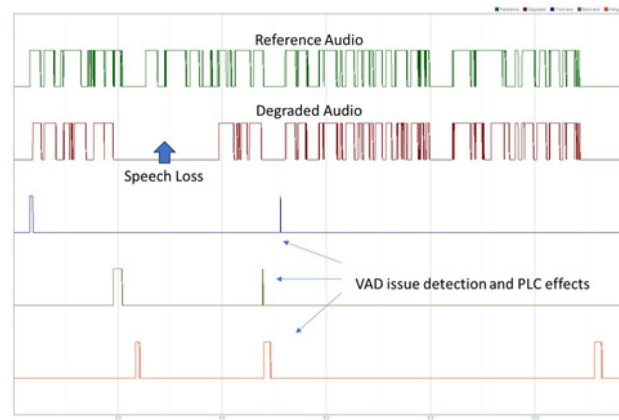
1. Specify the location of speech files
2. Create or use a predefined metric profile
3. Define how to retrieve results
4. Run MetricServer
5. Analyse results

Key Features

- ▶ Bulk Processing speech file pairs for MOS and KPIs
- ▶ Web User Interface or Python-based API
- ▶ Support PESQ, POLQA®, VISQOOL speech analysis, PEAQ Music analysis, DTMF Integrity
- ▶ High Scalability : 50,000+ speech per day
- ▶ Dashboard and Graphical view analysis or API export
- ▶ Unique Speech Performance Analysis (SPA) Technology

Technical Highlight: Opale Systems' SPA - Bring more value to your clients than a MOS !

In addition to providing state-of-the-art MOS scoring, Opale Systems' MetricServer solution provides comprehensive **analysis of speech signals and waveforms**. This makes it possible to extract key indicators such as the percentage of speech loss or noise, the level of speech, which combined with the MOS notation **better qualify users Quality of Experience**. Moreover, Opale Systems' Speech Performance Analysis (SPA) technology provides all the measures needed to **understand problems associated with poor MOS results**: this consists on a set of graphs and dashboard including frame-by-frame time shifts, frame-by-frame MOS score, **speech loss analysis** and much more.

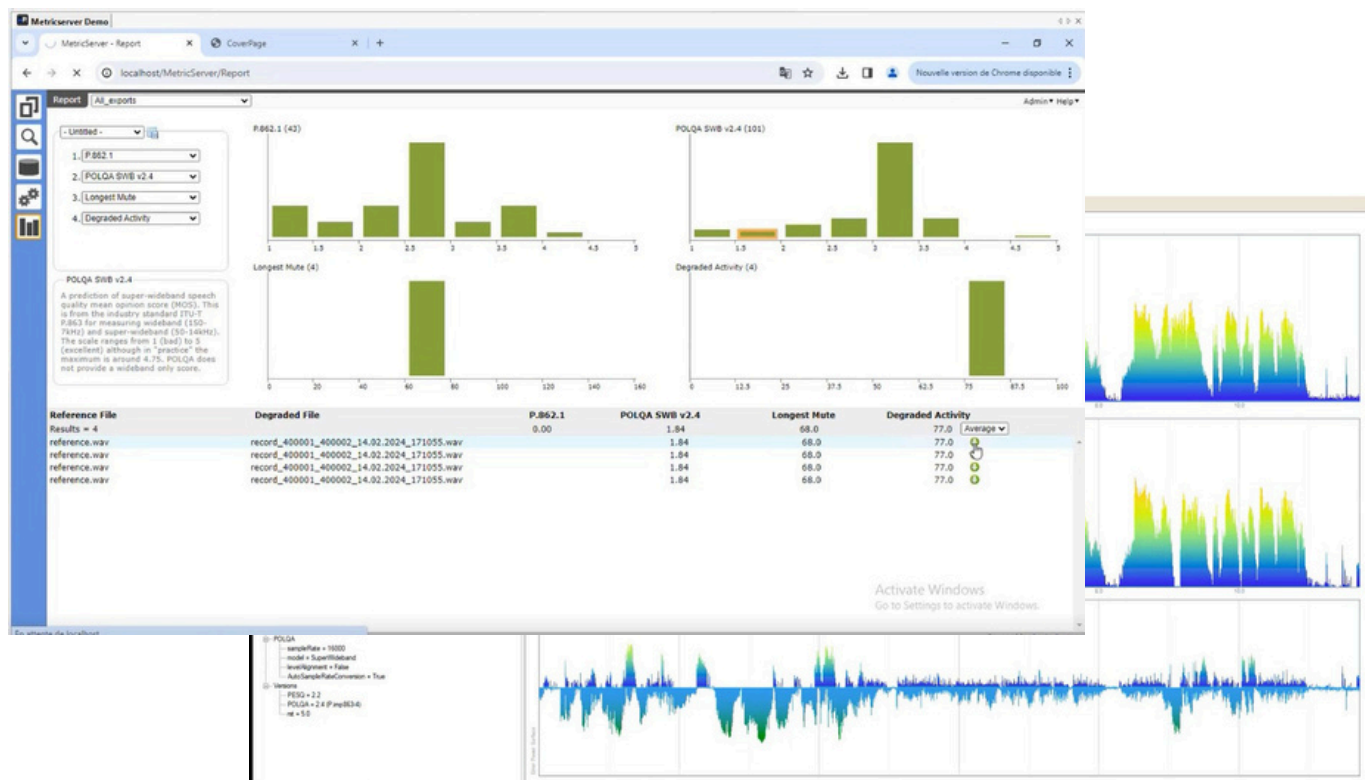


Speech Loss Analyser

Technical Facts

Feature/Item	Description Windows 10/11 - Windows Server 2016 / 2019
Server	Intel i7 / Xeon E5, 8 GB RAM - 1.5GB Disk space
User Interface & APIs	Web User Interface Python-based API PESQ (ITU-T Rec. P.862, P.862.1, P.862.2)
Supported Metrics	POLQA (ITU-T Rec. P.863) v2.4 & 3 ViSQOL PEAQ (ITU-R Rec. BS.1387) ODG & DI Active Speech Level (ITU-T Rec. P.56) DTMF Integrity PSQM, PSQM+, PAMS
MetricServer File Processing	Process speech file using batch or 'background processing' jobs Multiple queues in parallel 8k, 16k, 32k, 44.1k or 48k sample
Media Files	rate, mono / Windows .wav files / PCM files (headerless)
Voice Analysis KPIs	Signal Latency Percentage of speech loss Speech level Noise level
Reporting/ Dashboard	Results stored in Database, CSV file or through API Dashboards with cascading filter to isolate results of interest
Troubleshooting with Opale Systems SPA Technology	Waveform analysis, Frame by Frame time offsets/scores, Speech Loss Analysis

Advanced Troubleshooting Reporting



Ordering Information

Product No.	Model	Description
MetricServer System		
000083	MS-SKM	Opale Systems MetricServer Software Management Key
Speech & audio quality metrics		
000085	MS-POLQA	POLQA® P.863 speech quality metrics non transferable for MetricServer Limited to 480 mins of speech analysis per hour(1)
000146	MS-POLQA-UPG	POLQA® P.863 speech quality metrics upgrade non transferable for MetricServer - Upgrade to version 3.0
000086	MS-PESQ	PESQ P.862 speech quality metrics for MetricServer Limited to 480 mins of speech analysis per hour (1)
000181	MS-PEAQ-ODG	Perceptual Evaluation of Audio Quality (PEAQ) metrics for MetricServer Limited to 480 mins of audio analysis per hour (1)
000204	MS-SPA	Opale Systems Speech Performance Analysis (SPA) KPIs for MetricServer Limited to 480 mins of speech analysis per hour(1)
000203	MS-VISQOL	VISQOL speech quality metrics for MetricServer Limited to 480 mins of speech analysis per hour (1)
MetricServer - Subscription		
000225	MS-PESQ-SUB	MetricServer PESQ Subscription Monthly Fee - Support 480 min of speech analysis per hour Includes MetricServer software with Speech Performance Analysis and PESQ Licence - Support - Maintenance & Support - 1 year commitment - Invoiced Quarterly -
000226	MS-POLQA-SUB	MetricServer POLQA Subscription Monthly Fee - Support 480 min of speech analysis per hour Includes MetricServer software with Speech Performance Analysis and POLQA Licence - Support - Maintenance & Support - 1 year commitment - Invoiced Quarterly -