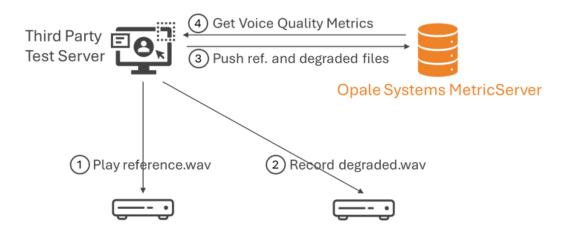


MetricServer

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 Pythonbased 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

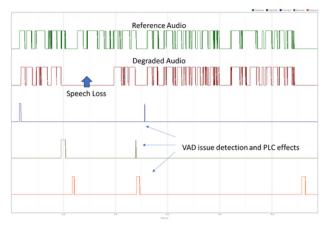
opale systems >

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.



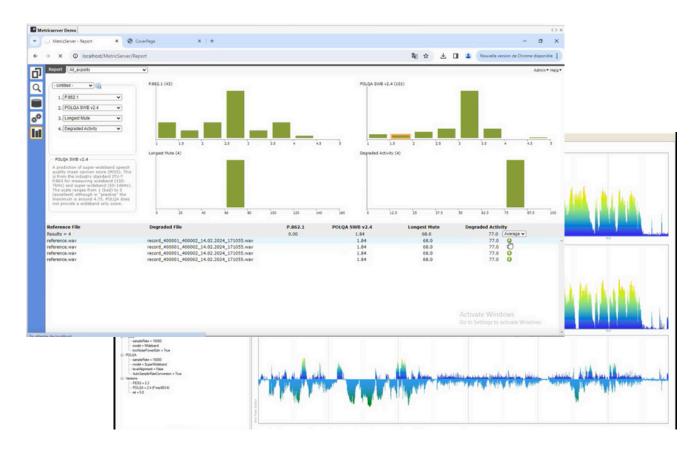
Speech Loss Analyser

| Feature/Item | Description |
|------------------------------|---|
| Server Requisites | Windows 10/11 - Windows Server 2016 / 2019 Intel i7 / Xeon E5, 8 GB RAM - 1.5GB Disk space |
| | Web User Interface |
| User Interface & APIs | Python-based API |
| Supported Metrics | PESQ (ITU-T Rec. P.862, P.862.1, P.862.2) |
| | POLQA (ITU-T Rec. P.863) v2.4 |
| | ViSQOOL |
| | 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 |
| Media Files | 8k, 16k, 32k, 44.1k or 48k sample 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 |
| Troubloshooting with Opple | Waveform analysis, |
| Troubleshooting with Opale | Frame by Frame time offsets/scores, |
| Systems SPA Technology | Speech Loss Analysis |

Technical Facts



Advanced Troubleshooting Reporting



Ordering Information

| Product No. | Model | Description |
|---|--------------|---|
| MetricServer System | | |
| 000083 | MS-SKM | Opale Systems MetricServer Software Management Key |
| Options & Licence | es | |
| 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 |
| 000203 | MS-VISQOL | VISQOL speech quality metrics for MetricServer Limited to 480 mins of speech analysis per hour ⁽¹⁾ |
| For MetricServer as a Service (SaaS) - Contact sales@opalesystems.com | | |

(1) Additional Licences can be purchased to increase the min audio analysis per hour rate