

# MetricServer

Process speech file pairs through a selection of industry standard speech and audio quality metrics using MetricServer from Opale Systems. Generate Mean Opinion Score (MOS) estimates and other key metrics. The multi-user MetricServer has web-based and automation interfaces.

## Who Should Be Interested?

- Codec/systems developers and quality assurance testers working with speech and audio media.
- Speech Performance Analyser (SPA) users requiring ITU-T Rec. P.863 POLQA.

Applications include regression testing, in-house test equipment enhancement, system evaluation and codec development.

## How Does It Work?

Accessed via a web-page or Python API, MetricServer has an easy-to-use, workflow-oriented approach which guides users through the five-step test cycle as shown below:



Source Configuration specifies input file paths and matching syntax to define the required subset of files, for example, to match all files with names beginning "Codec\_d3\_003a"



Metric Configuration specifies one or more of the available metrics with which to process the selected files



Output Configuration specifies the location and format for the results



Process using batch or 'background processing' jobs



Report by clicking on histograms to create a cascading filter to quickly isolate results of interest



---

## Automation

Using the platform-independent Python API, MetricServer can be incorporated into any proprietary test system. The reference and degraded speech files are passed to MetricServer by the host software.

The results are returned to the host application, to a database or to a file.

## Benefits

- A range of popular metrics – see list below
- Opale speech transmission performance expertise – over three decades
- Logical workflow, easy to use
- Automation script support with platform-independent Python library
- Multi-user – supports up to five concurrent browser or API sessions, with expansion if needed
- Graphical and textual presentation in browser application, for a detailed understanding of speech quality performance
- Export to comprehensive diagnostic file format (\*.rst) which may be viewed using a free Opale application for Windows

## Supported Metrics

ITU-T Rec. P.862, P.862.1, P.862.2 Perceptual Evaluation of Speech Quality, PESQ; ITU-T Rec. P.863 Perceptual Objective Listening Quality Analysis, POLQA; ITU-T Rec. P.861 Perceptual Speech Quality Measure, PSQM, PSQM+; Perceptual Analysis/Measurement System, PAMS; ITU-R Rec. BS.1387 Perceptual Evaluation of Audio Quality, PEAQ; ITU-T Rec. P.56, Method B Objective Measurement of Active Speech Level.

## Media Files

8k, 16k, 32k, 44k1 or 48k sample rate, mono; Windows .wav or headerless pcm files.

## System Requirements

Supported Operating Systems: Windows 7 Professional, Windows 10, both 32-bit & 64-bit versions; Windows Server 2012.

Processor: Intel i7 / Xeon E5 processor or equivalent (Recommended); RAM: 4 GB (Minimum); 8 GB (Recommended); Hard Disk: Up to 1.5 GB of available space may be required;

Display: 1024 x 768 high colour (minimum); 1280 x 1024 high colour (recommended).

## Browser (earliest supported version)

- Safari 5.1.4
- Internet Explorer 9
- Firefox 11
- Chrome 17

