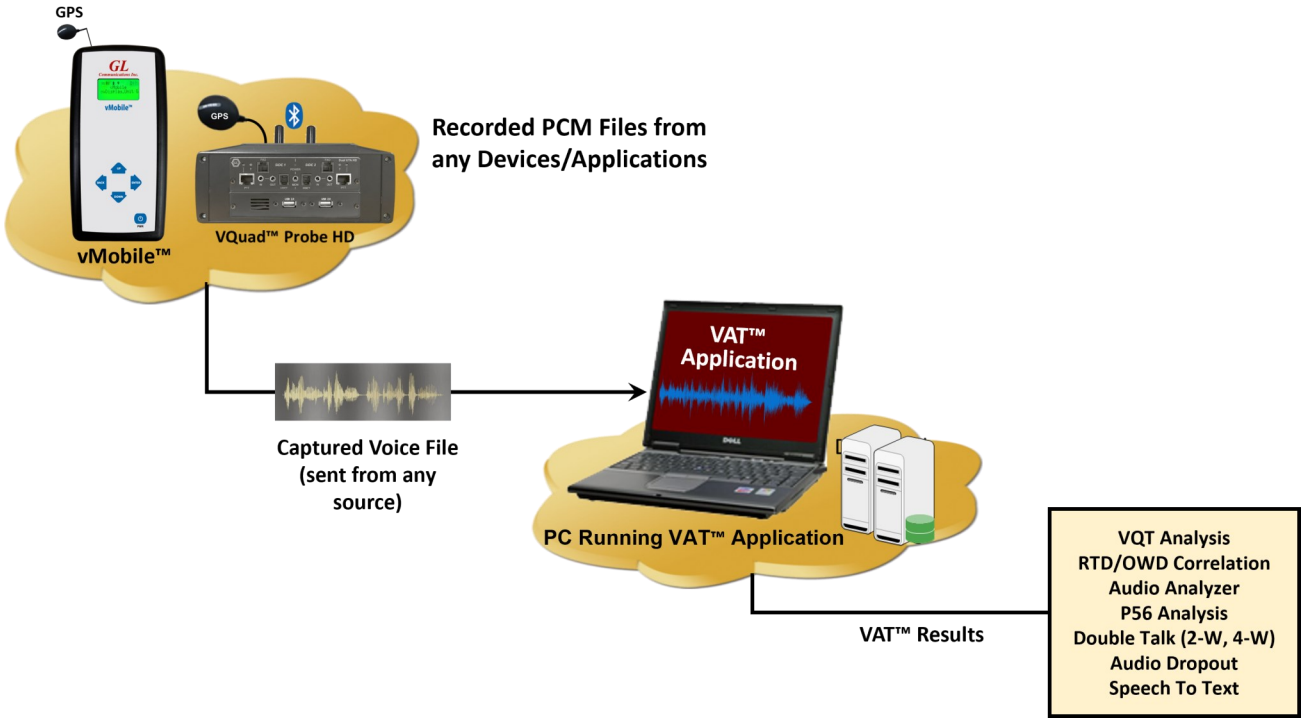
Voice Analysis Tool (VAT™)



Overview

The GL VAT™ application analyzes the audio content within any NB, WB, or SWB PCM audio file and generates a variety of audio metrics including Frequency Bandwidth, Speech Activity, Active Speech Level, Noise Level, DC Offset, and RMS Power. When both the Reference file (pre-defined file) and Recorded files are available, the GL VAT™ application can generate additional metrics such as Round Trip and One Way Delay measurement, Audio Dropout analysis, Double-Talk measurements, and Voice Quality Analysis (when also coupled with the GL VQT POLQA solution). Additional metrics of the captured audio includes Speech to Text analysis with pass/fail when coupled with the GL Speech to Text Analysis solution.

GL's VAT™ operations are fully automated by detecting the audio files within a user-specified directory and analyzing same as the files appear. Using configuration settings associated with the Degraded voice file name, the VAT™ can specify which tests to run, specifies the configuration for each test, and associate the Reference file for tests that require both Degraded and Reference files.

All the VAT™ associated results are sent to the GL WebViewer™ central database and can be accessed using the WebViewer™ web browser. If the network connection is lost between VAT™ and the database, the data is saved internally. Once the network connection is re-established the data is automatically sent from the VAT™ to the GL WebViewer™ database, so no data is lost.

For more details, please visit Voice Analysis Tool webpage.

Main Features

- GL VAT™ supports analyzing any Raw PCM voice file including NB, WB, and SWB. Audio files can be generated from any application including GL VQuad™ and vMobile™
- Fully automated operation with log file containing results and stored in the GL Central Database which can be accessed easily using the GL WebViewer™
- VAT™ CLI (Command Line Interface) supports remote operation
- Audio analysis includes, Round Trip and One Way Delay, Dropout Audio analysis, Double-Talk, Power Level and Frequency Analysis, Speech Activity, Active Speech Level and Noise Level, and DC Offset
- Supports VQT analysis when coupled with the GL VQT software
- Supports multiple analytical tests per individual voice file

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VAT™ Results

VAT™ results are displayed on the main window and these results can be viewed using GL's WebViewer™ database and the results can be saved locally to a log file.

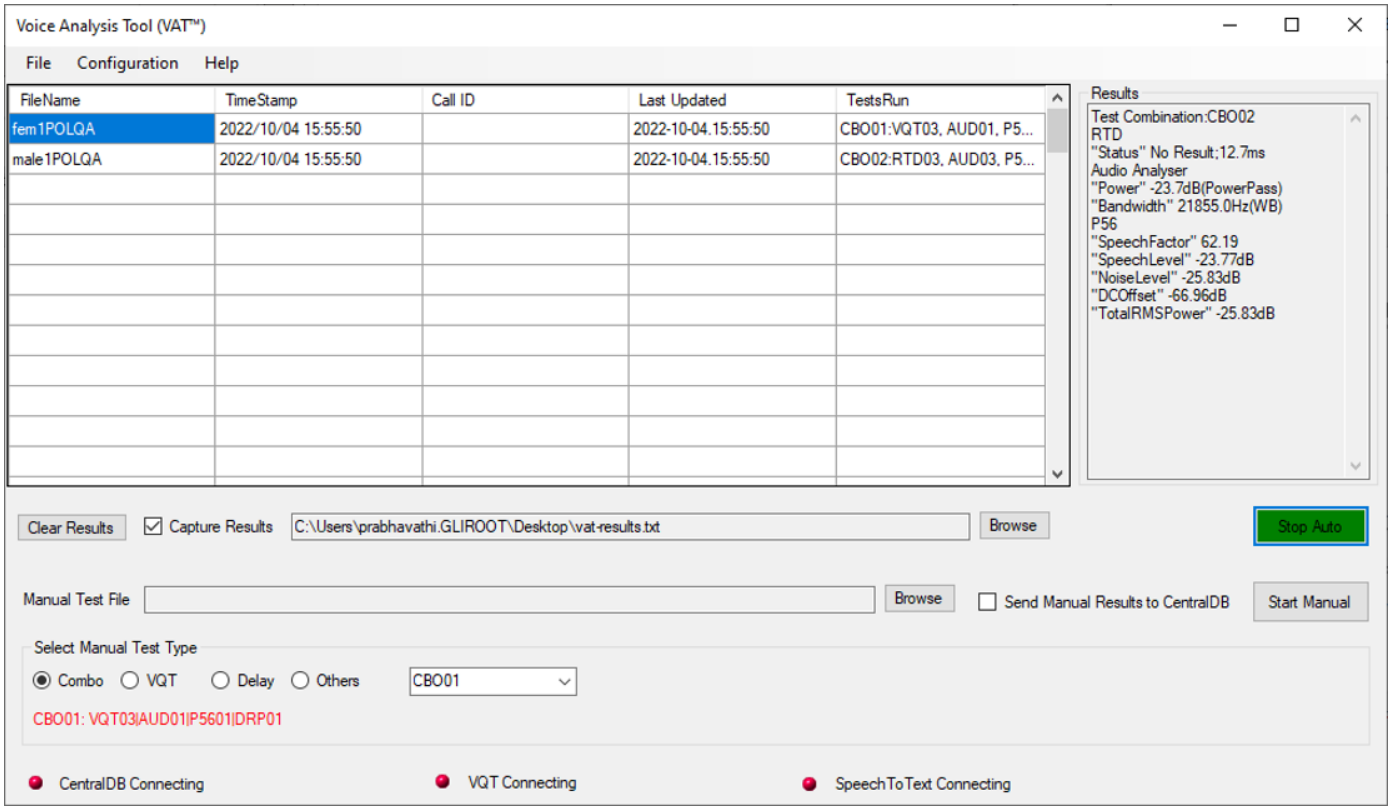

Figure: VAT™ Results

Audio and Delay Analysis (Display duration: 08-18-2022 03:52:25 - 08-18-2022 04:05:25)

VQuad Timestamp	Call Timestamp	VQuad Call ID	VQuad Device ID	VQuad GPS	RTD (ms)	Rating	PDD (ms)	SNR (dB)	OWD (ms)	CT (sec)	CCT (sec)	Signal Gain (dB)	Line Current (mA)	Line Voltage (V)	Ring Type	Ring Voltage (V)	Speech Active Factor (%)	Active Speech level (dB)	Noise Level (dB)	DC Offset (dB)	Total RMS Power (dB)	Double-Talk	Speech Analysis	Dropout	VMWI	SDT
08/18/2022 04:02:48	08/18/2022 04:01:13	GL Test	ITSD2	N12955'35" E077936'05"						74.20																
08/18/2022 04:02:46	08/18/2022 04:01:13	GL Test	ITSD1	N12955'35" E077936'05"						68.40																
08/18/2022 04:02:14	08/18/2022 04:01:13	GL Test	ITSD1	N12955'35" E077936'05"	1352.30	Fail			1355.60			-26.80					53.19	-26.79	-29.53	-36.13	-29.53	Pass		Fail (Proper Voice 79%)		
08/18/2022 04:02:03	08/18/2022 04:01:13	GL Test	ITSD2	N12955'35" E077936'05"	1350.20	Fail			1353.40			-26.70					52.51	-26.69	-29.48	-37.43	-29.48	Pass		Fail (Proper Voice 79%)		
08/18/2022 04:01:42	08/18/2022 04:01:13	GL Test	ITSD2	N12955'35" E077936'04"	1350.20	Fail			1353.40			-26.70					52.50	-26.68	-29.47	-37.52	-29.47	Pass		Fail (Proper Voice 79%)		
08/18/2022 04:01:38	08/18/2022 04:01:13	GL Test	ITSD1	N12955'34" E077936'04"							15.30															
08/18/2022 04:01:29	08/18/2022 04:01:13	GL Test	ITSD2	N12955'34" E077936'04"											Peak	127										
08/18/2022 04:01:26	08/18/2022 04:01:13	GL Test	ITSD1	N12955'34" E077936'04"			3069																			

Figure: WebViewer™ Database

Buyer's Guide

Item No	Product Description
VQT008	Voice Analysis Tool
VQT291	vMobile™
VQT002	Voice Quality Testing (PESQ only)
VQT010	VQuad™ Software
VQT006	Voice Quality Testing (POLQA v 2.4)
VQT007	Voice Quality Testing (POLQA v3)
VQT014	VQT POLQA Auto

Item No	Related Hardware
VQT251	Dual UTA HD Next generation Dual UTA with FXO Wideband support
VQT252	Dual UTA HD – Bluetooth Option
VQT280	VQuad™ Probe HD (with Dual UTA HD)

Item No	Related Software
VBA032	Near Real-time Voice-band Analyzer
EMU037	Echo Measurement Utility (EMU) Software
VQT040	WebViewer™

For more details, please visit Voice Analysis Tool webpage.

For complete list of VQT products, please visit https://www.gl.com/voice-quality-testing-pesq-polqa.html webpage.

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