

# Speech Analyzer Performance Option

## Executive Summary

In a village setting, students often use hand held digital recorders to gather audio recordings for classroom work or for Thesis analysis work. The minimum settings for these recorders is 44KHz Stereo, which is a common setting for both sound and music use. Later, when students are doing their phonetic analysis work, there is a considerable amount of data that's being processed to support the 44KHz Stereo settings. Students would benefit from having smaller faster files. It's not necessary for them to use Stereo recordings since that's only needed for music analysis.

## The new feature would work like this:

When an audio file is first opened and displayed on the screen, it would be inspected to determine if the file is a 44KHz Stereo file, and if it is then display a dialog box like this...

This recording is 44KHz Stereo. Analysis can be done 4 times faster by converting it to 22KHz Mono. Do you want to make a new smaller copy of the file?

[YES](#)   [NO](#)   [More Info](#)

**Yes** – SA will then create a new smaller copy of the file and display it. Then SA would close the original file.

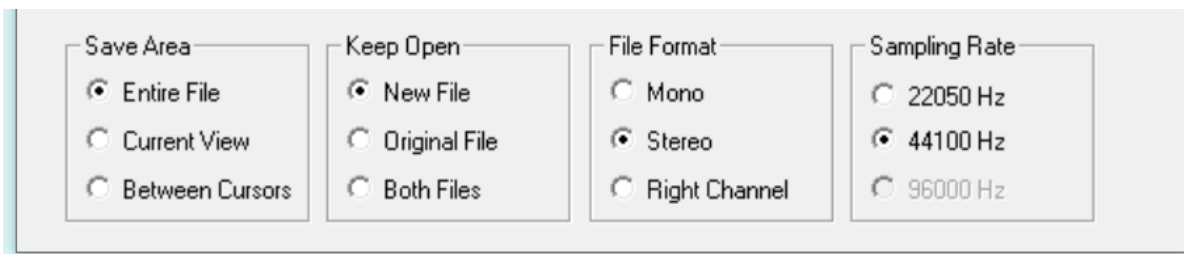
**No** – Closes the dialog box and continues using the current audio settings.

**More Info** – “It's only necessary to keep the original 44KHz Stereo file if music is being analyzed. The analysis of Phonetic sounds can be accurately done using the 22KHz Mono setting, since people have only one voice. Stereo recording are of little or no help when doing Phonetics analysis.”

## Implementing the solution:

The source code is already in place and is currently used in the export processing of a file (See below). No major changer need to be made except for adding the dialog box that is shown above.

The current SA export feature looks like this. The source code needs to select the settings “Mono” & “22050 Hz”.



The screenshot shows a dialog box with four sections, each containing radio button options:

- Save Area:**  Entire File,  Current View,  Between Cursors
- Keep Open:**  New File,  Original File,  Both Files
- File Format:**  Mono,  Stereo,  Right Channel
- Sampling Rate:**  22050 Hz,  44100 Hz,  96000 Hz

In the event that a new smaller file is made, then it should be given an extension of “- 22KHz Mono”.

In the case that a user always wants to use 44KHz, there should be an option to no longer show the dialog box.