Detailed user guide for Audacity

1. General presentation

Name: Audacity

Categories:

Recording

Audio editing

Audio processing

Sequence

Mixing

Plug-in: YES

Versions: 1.0.0 (Mac and Windows)

Platforms (systems): Mac (from OS9) and Windows (from Windows 98)

URL (last log-on date): http://audacity.sourceforge.net (15/07/2003)

Size of file to be downloaded: 1.5 Mo

Language: English

Skill level: High

2. Technical description

Formats

Import files: Wave, Aiff, raw data, labels (in text format)

Export files: Wave, Aiff, Ircam, AU, Mp3

Plug-in: VST

Functionalities

Audio recording

To use the PC's microphone: bottom right on the screen, right click on the little speaker, then "volume control", options, properties, recording (check that the microphone box is ticked in order to see the potentiometer), OK.

To record, left click on the button with a red circle in the main window, and on the button with a yellow square to stop recording.

For stereo recording, go to the File menu, then Preferences, Audio I/O, Record in Stereo.

To import an audio file
Project menu, Import Audio
Choose a file
The file may be in Aiff, Wave or mp3

Exporting the project as an audio file

The audio file will contain the sound as it was heard in Audacity before, with all the settings (volume, mute...). It will be in mono.

Click on: File menu, Export as...* or Export as mp3

To choose the type of file in Export as..., select File menu, Preferences, File Formats, Uncompressed Export Format.

In mp3, select the compression rate by clicking on the File menu, then Preferences, File Formats, MP3 Export Setup. The more compressed the file is, the smaller it will be and the better the sound.

Audio editing

Audacity always lines up fragments end-to-end.

To insert a silence: Edit menu, then choose the duration in seconds.

Cut-and-paste works the same as in word processing (select, then Ctrl-C (or Apple-C for Mac), move the cursor to where you want to paste, then Ctrl-V (or Apple-V for Mac)).

To delete a part of the sound: select, then Ctrl-X (or Apple-X for Mac).

To insert labels in the project (on a special track): Ctrl-B (or Apple-B). The position of a label cannot be changed or a name typed in, but a name can be imported in text format (Project menu).

Audio processing

First select a piece of sound on a track in the main window in order to use the effects available in the Effect menu.

Sequence

To add a track

Recording and importing will automatically add the necessary track, or two in the case of stereo.

To add an empty audio track: Project menu, New Audio Track.

To remove a track: select the track(s) to be removed, then click: Project, Remove Audio Track(s).

Mixing

No mixing desk is available.

Set the volume by using the envelope Tool: square button at top left of main window.

Representations

To access: small scroll menu to the left of the sound image in the main window.

Waveform and Waveform (dB)

The usual representation of sound intensity, on a linear (Waveform) or logarithmic (Waveform (dB)) scale

Spectrum

In addition to the usual representation of the sound, Audacity can represent the spectrum content of the sound (spectrogram).

The settings are available in the File menu: Preferences, Spectrograms. Proceed by successive tries.

Pitch

Shows the movement of the basic sound pitch (melody). The graph is approximate.

VST plug-ins

The software comes with a plug-in: Freeverb2

Plug-ins can be downloaded for free

(http://usitweb.shef.ac.uk/~mup01jrm/vst/vstlinks.htm).

Choose plug-ins that are compatible with the platform used (Mac or Windows). For Mac, the icon of the file containing the plug-in shows a screw (nut). For Windows, the extension is .dll (Dynamic Link Library).

Put them in the VST directory situated on the same level as the software itself.

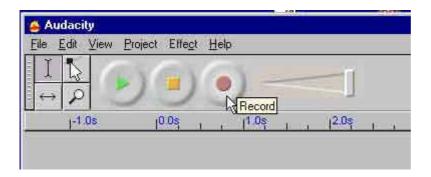
They will appear in Audacity under the Effect menu (see audio processing).

3. Details of the various windows (with images or screen videos)

Audio recording

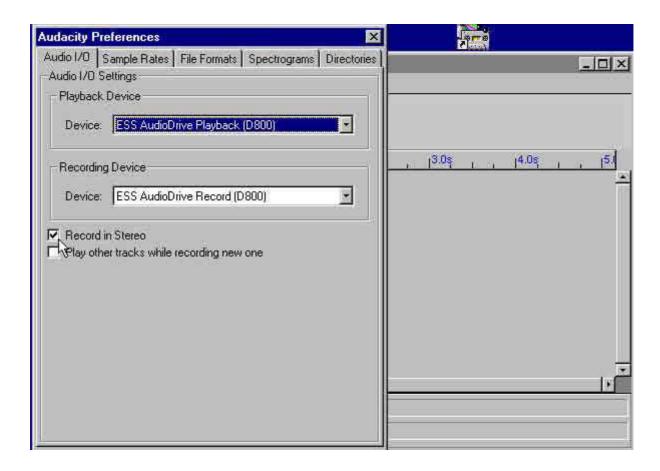
To use the PC microphone: bottom right on the screen, right click on the little speaker, then "volume control", options, properties, recording (check that the microphone box is ticked in order to see the potiontiometer), OK.

To record, left click on the button with a red circle in the main window, and on the button with a yellow square to stop recording.



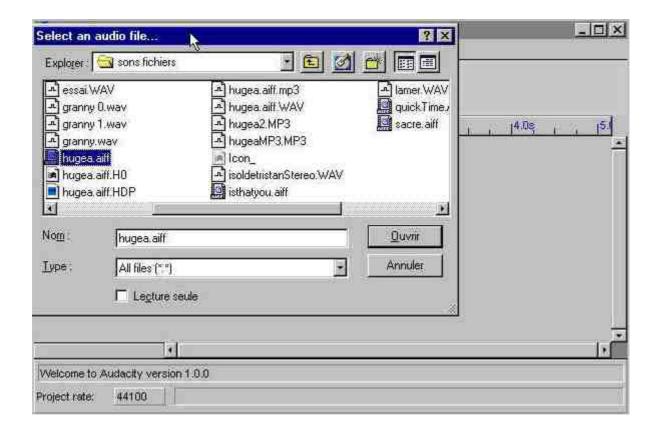
Sound example:

To record in stereo, go to the File menu then click on Preferences, Audio I/O, Record in Stereo,



To import an audio file

Project menu, Import Audio
Choose a file
The file may be in Aiff, Wave or mp3



Audio editing

Audacity always lines up fragments end-to-end.

To insert a silence: move the cursor to where you want to insert, click Edit menu and choose the duration in seconds.

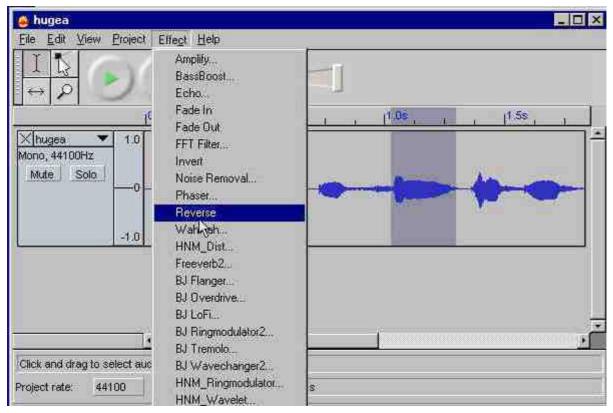
Video example: double click on the image above to see the video

Cut-and-paste works the same as in word processing (select, Ctrl-C (or Apple-C), move the cursor to where you want to paste, then Ctrl-V (or Apple-V)).

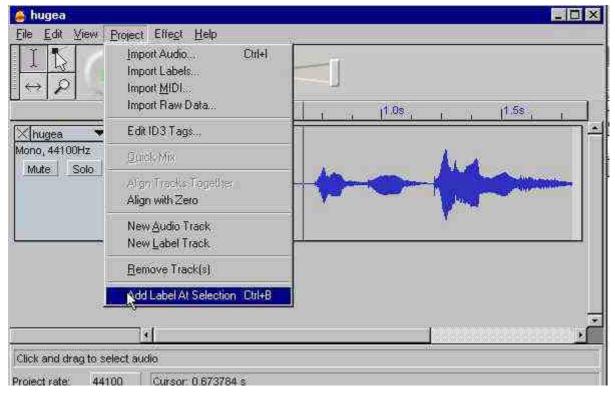
Delete a piece of sound: select, then Ctrl-X (or Apple-X).

Audio processing

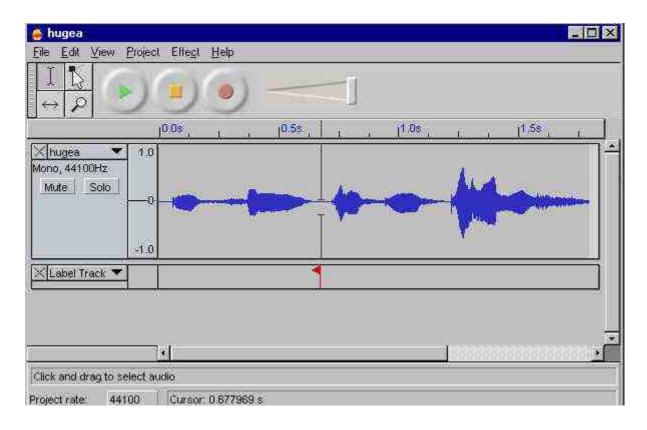
First select a piece of sound in the main window in order to use the effects available in the Effect menu.



To insert labels in the project (on a special track): place the cursor, then click on Project menu, Add Label At Selection or Ctrl-B (Apple-B). The position of a label cannot be changed or a name typed in, but a name can be imported in text format (Project menu).



A label looks like a little flag. It is just a landmark.



Sequence

To add a track

Recording and importing automatically adds the necessary track, or two for stereo.

To add an empty audio track: Project menu, New Audio Track

To remove a track

Select the track(s) you want to remove, then: Project menu, Remove Audio Track(s)

Mixing

No mixing desk is available.

Adjust volume with the envelope Tool: square button at top left of main window.

Video example: double click on the image above to see the video

Representation

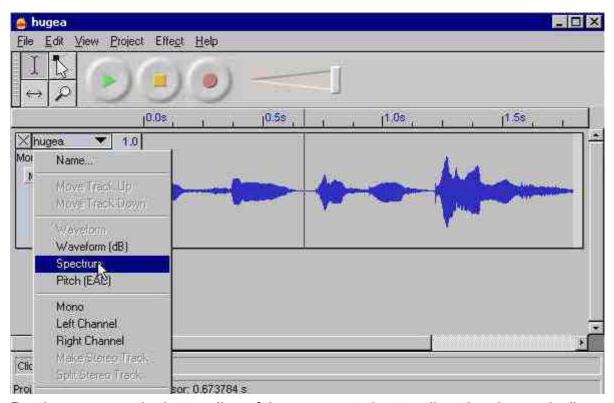
To access: small scroll menu to the left of the sound image in the main window.

Waveform and Waveform (dB)

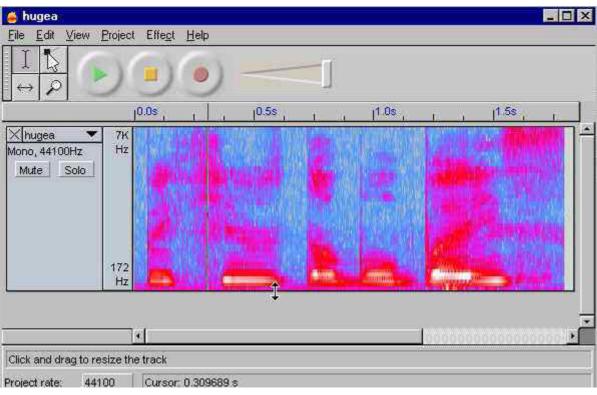
The usual representation of sound intensity, on a linear (Waveform) or logarithmic (Waveform (dB)) scale.

Spectrum

In addition to the usual representation of the sound, Audacity can show the spectral contents of the sound (spectrogram).



Put the cursor on the bottom line of the representation to adjust the size vertically:



Settings are available under File menu, Preferences, Spectrograms. Keep trying to get the desired effect.

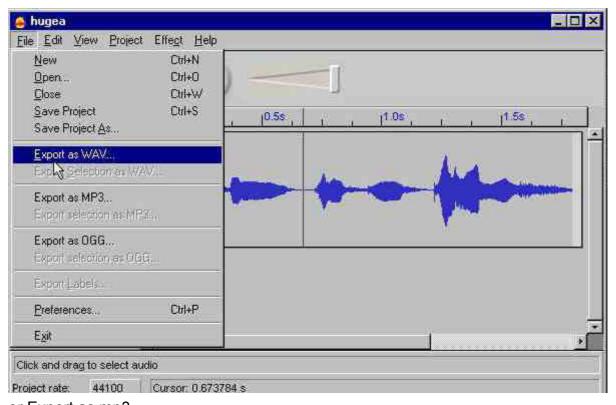
Pitch

Shows the movement of the basic sound pitch (melody). The graph is approximate.

Exporting the project as an audio file

The audio file contains the sound as it was heard in Audacity before, with all the settings (volumes, mute...). It will be in mono.

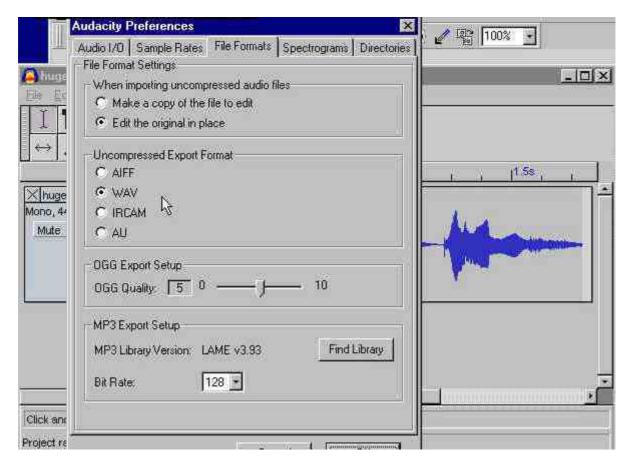
Click on: File menu, Export as ...*



or Export as mp3



To select the type of file in Export as..., go to the File menu, then Preferences, File Formats, Uncompressed Export Format.



In mp3, choose the compression rate in File menu, Preferences, File Formats, MP3 Export Setup.

The more compressed a file is, the smaller it will be and the better the sound.

VST plug-ins

The software comes with a plug-in: Freeverb2

Plug-ins can be downloaded for free

(http://usitweb.shef.ac.uk/~mup01jrm/vst/vstlinks.htm).

Choose a plug-in compatible with the platform you use (Mac ou Windows). For Mac, the icon for the file with the plug-in shows a screw (nut). For Windows, the extension is .dll (Dynamic Link Library).

Put them in the VST directory on the same level as the software itself.

They will appear in Audacity in the Effect menu (see audio processing).

Plug-ins accepted: VST

Put them in the "VST" folder that is on the same level as the software itself on the hard disk.

3. Comments, tips

To export the project in mp3, download a 416ko compressed file (for free) containing lame.exe and lam.dll on the site

http://mitiok.free.fr/

When you now export in mp3 for the first time, Audacity will ask where the dll is.

You can reduce the computer's workload by reducing the project's sample rate. Go to File, Preferences, Sample Rates. The best compatibility is obtained with 44,100 kHz.

When using more than one hard disk, it is preferable not to put the temporary files generated by Audacity on the same disk as the system software. Temporary files are bulky and may saturate a disk. Choose where to put the directory with temporary files by going to the File menu, Preferences, Directories.