

Advanced Gtk+ Sequencer



User's Handbook

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Dedication

This book is dedicated to my father †Hans-Jörg Krähemann.

Foreword

When I started to use GNU/Linux in 2001 I missed only one thing. A sequencer with a nice GUI. There was already rosegarden available. But who didn't get stuck of midi setup, yet? The time before I was using free software and became an affiliate to its community I was using Microsoft Windows 98 on my father's desktop computer and did my first steps in Sun Microsystem's Java 1.2.

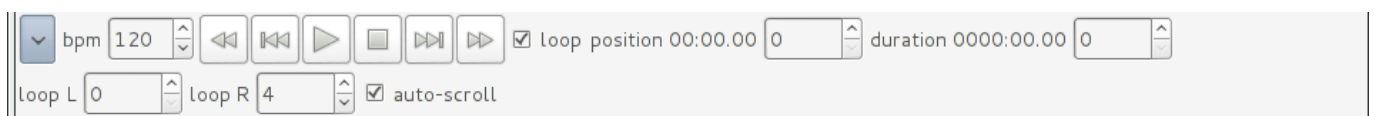
My very first own Notebook was a Compaq Evo n160 and it's preinstalled Microsoft Windows 98 had to vanish because I became a fellow of Richard Stallman. Soon, I begun to code and older I became my demands to ags increased. I developed the concept of the underlying audio library myself as not graduated college student.

October 2005, I decided to reimplement Advanced Gtk+ Sequencer from scratch in order to get rid of inherited burden. And it was one big development process until I was almost satisfied with it's design. There was a time in 2007 where I even wanted to replace GObject and Gtk+ dependencies with my own libraries I begun to develop. I'm glad of didn't doing so.

Thank you!

Chapter 1

The navigation



With the navigation you have overall control of your song. Settings you perform here may influence the behaviour of AGS.

1.1 BPM

The beats per minute (BPM for short) indicates the velocity of a song being played. To adjust the BPM of the project in-/decrement the spinner labeled with bpm. To edit patterns or notes at a more granular rate select the wished tact within the appropriate engine or editor.

To calculate timings you divide 1 minute with the entered BPM and divide it with basic. For example you have a BPM rate of 120:

$$t = 1/120 \quad (1.1)$$

1.2 Playback controls

With these controls you can play/stop a song or seek to the wished position.

icon	action	description
⏮	backward	Seeking back until it's pressed again.
⏪	previous	Seeking back until it's not pressed anymore.
▶	play	Starts the engines and the piano roll.
■	stop	Stops the engines and the piano roll.
⏩	next	Seeking forward until it's not pressed anymore.
⏭	forward	Seeking forward until it's pressed again.

Table 1.1: AGS playback controls table

1.3 Loop

By enabling control notation loops. More loop related control see .

1.4 Position

Display or change position of playback, consider control.

1.5 Duration

Display or change duration of playback.

1.6 Loop offset

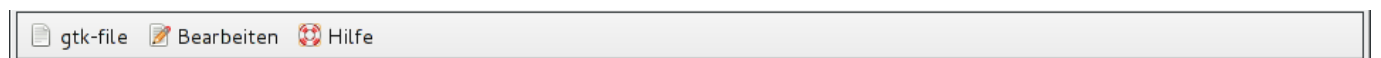
Set offset of loop, enable/disable by .

1.7 Auto-Scroll

Scroll during playback, influenced by .

Chapter 2

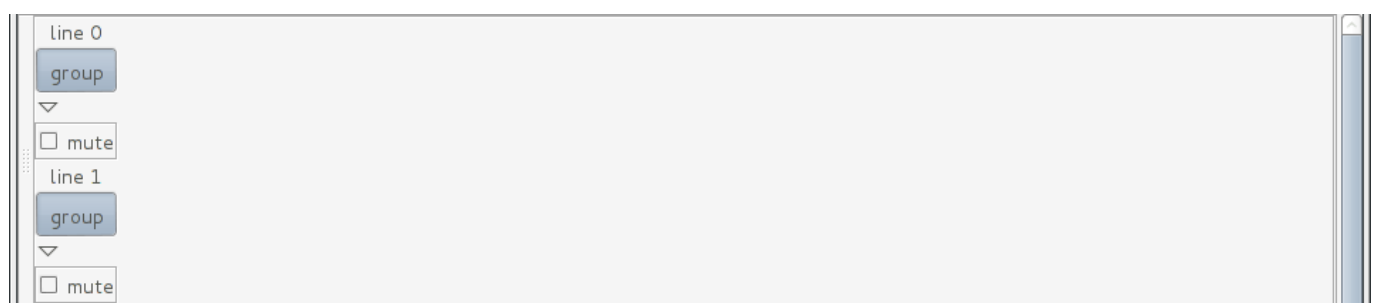
Engines



You can add engines by activating the appropriate menu item within the "add" submenu of the "edit" menu item. You may change the properties of an engine by opening the properties dialog from the context menu. From the context menu you may perform some other tasks, too.

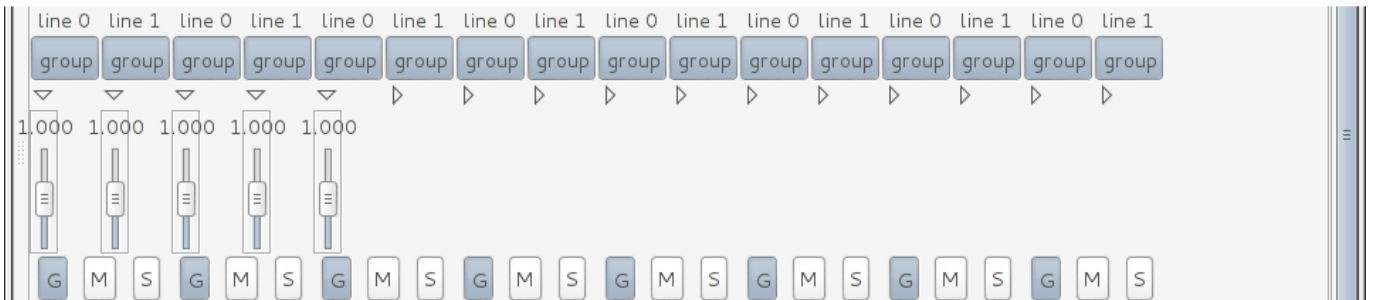
- To move up or down an engine open context menu and activate "up" respectively "down" entry.
- To show or hide an engine open context menu and activate "show" respectively "hide" entry. Note the engines won't be hidden entirely they are just collapsed.
- To rename an engine open context menu and activate "rename" entry.
- To remove an engine open context menu and activate "destroy" entry.
- To open properties dialog open context menu and activate "properties" entry.

2.1 Panel



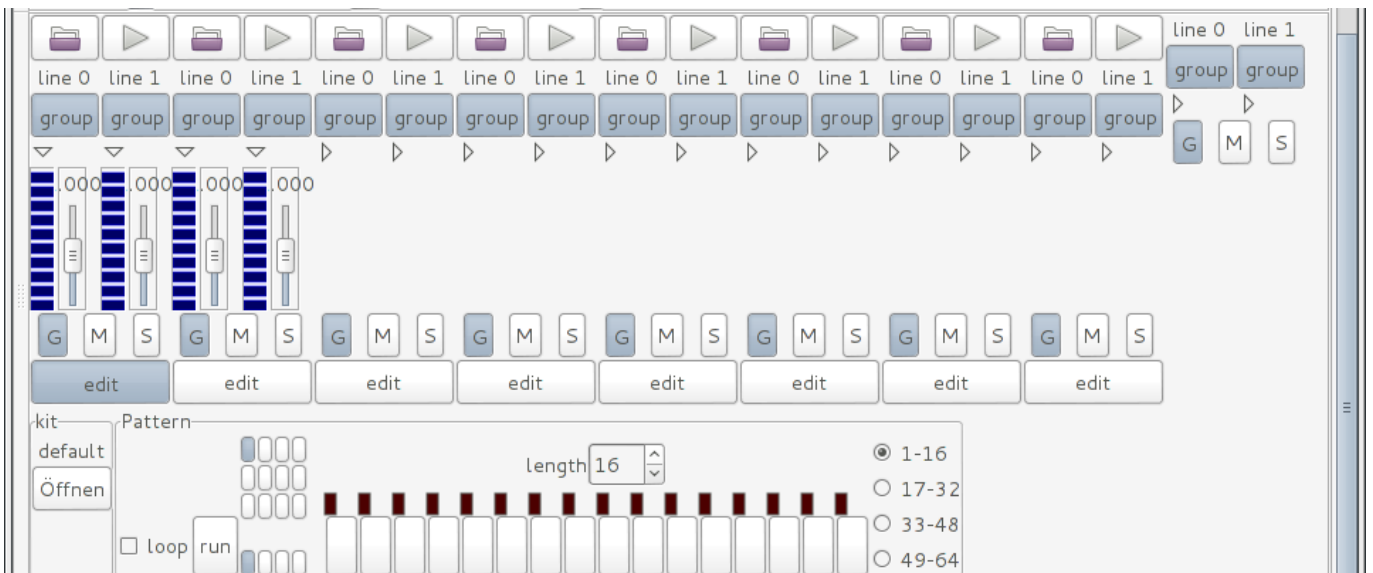
The panel is used to output to your soundcard.

2.2 Mixer



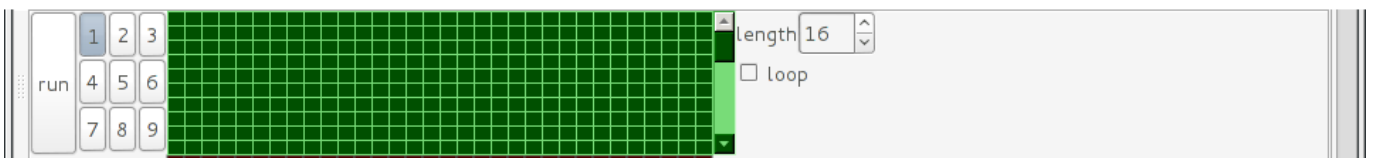
Bundle audio lines with the mixer and perform toplevel stream manipulation.

2.3 Drum



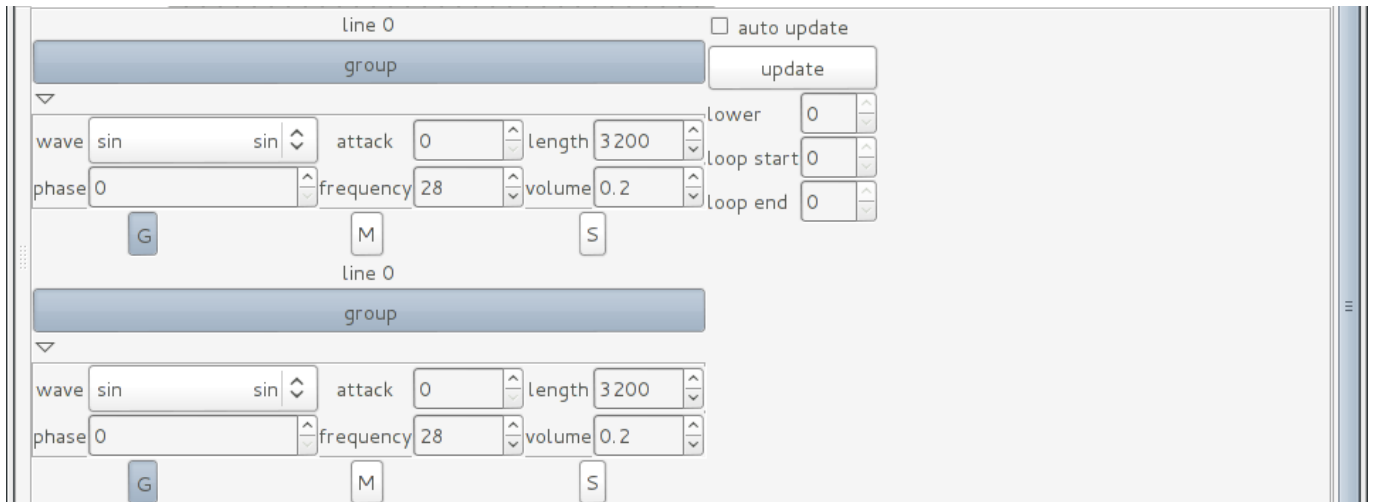
Produce an audio stream by defining a pattern. The drum supports opening audio files and associate to its input.

2.4 Matrix



Produce an audio stream by defining a pattern. The matrix itself doesn't have any audio signals on its own input you may rather link it to a synth engine.

2.5 Synth



Produce audio data using its oscillators.

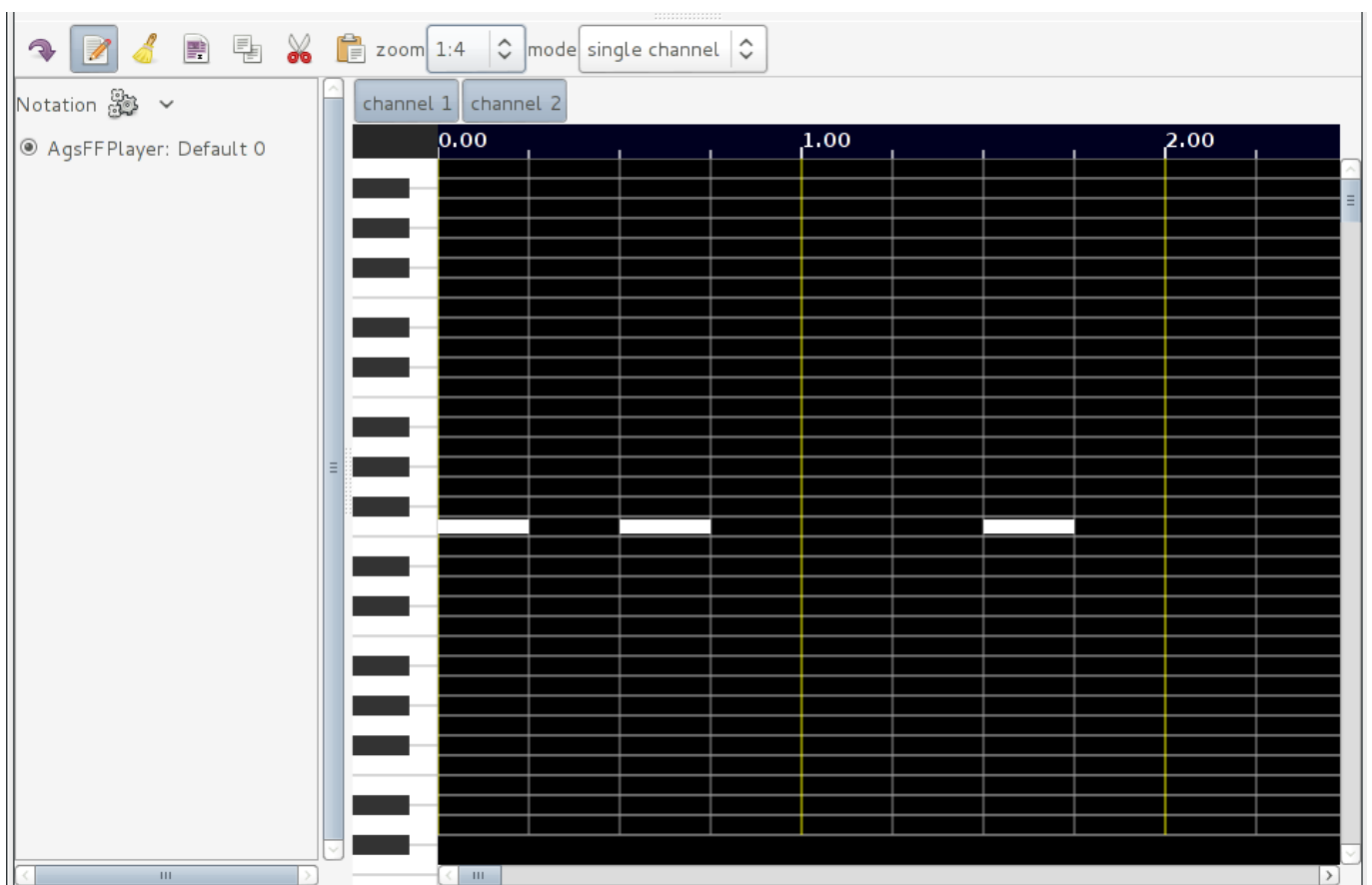
2.6 FFPlayer



Produce audio data by opening audio containers like Soundfont2 files.


Chapter 3

Editor

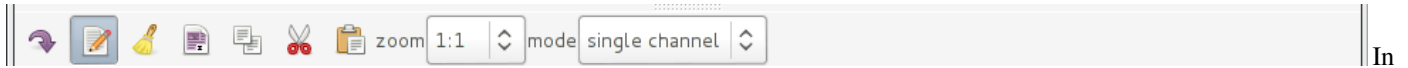


The editor features a piano roll. After linking an editor index with an engine you may perform tasks like adding notes or copy, cut and paste them. You may change view segmentation, too.

3.1 Linking

Before you might perform any task with the editor you have to link engines by adding an index. Then you should link it with an engine. That can all be done by using the menu button  of the index list.

3.2 Toolbar



the table below are the various buttons explained you may use for editing.








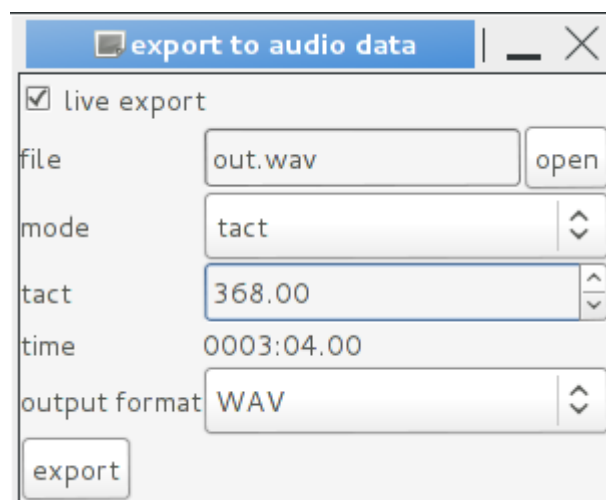
icon	action	description
	cursor	You may want to set the cursor to paste notes at the position where it is located.
	notes	Add notes by clicking within the piano roll and move to till them having the wished duration.
	delete	Delete notes by clicking on the note you don't want anymore.
	select	Select notes to copy or cut them.
	copy	Copy notes to the clipboard.
	cut	Cut notes to the clipboard.
	paste	Paste the previously copied or cutted notes at the cursor position or just insert them where they are/were located.

Table 3.1: AGS editor toolbar controls table.

Chapter 4

Export



Open export dialog within "file" menu item. You may export your project in realtime to WAV audio file previously opened. Specify the duration of the track within dialog.

Appendix A

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