

Writing Software Synthesizers for GStreamer



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Base classes

- audiofilter (gst-plugins-base): ~ 230 LOC
- audiosynth (new in buzztrax): ~ 500 LOC



Components

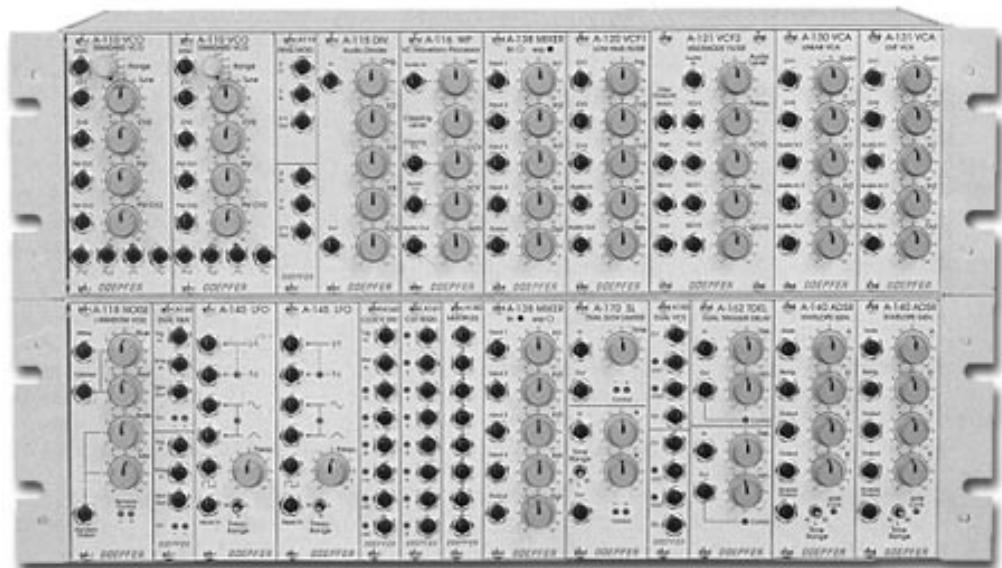
- envelopes (ad, adsr, d)
- filters (svf)
- oscillators (synth, wave)
- misc: combine, delay, tonconversion

-> reuse + unit-tests + docs



Composition

- derive from baseclass
- contains components
- helpers to proxy properties (gst/audio/plugin.c),
see also child-proxy



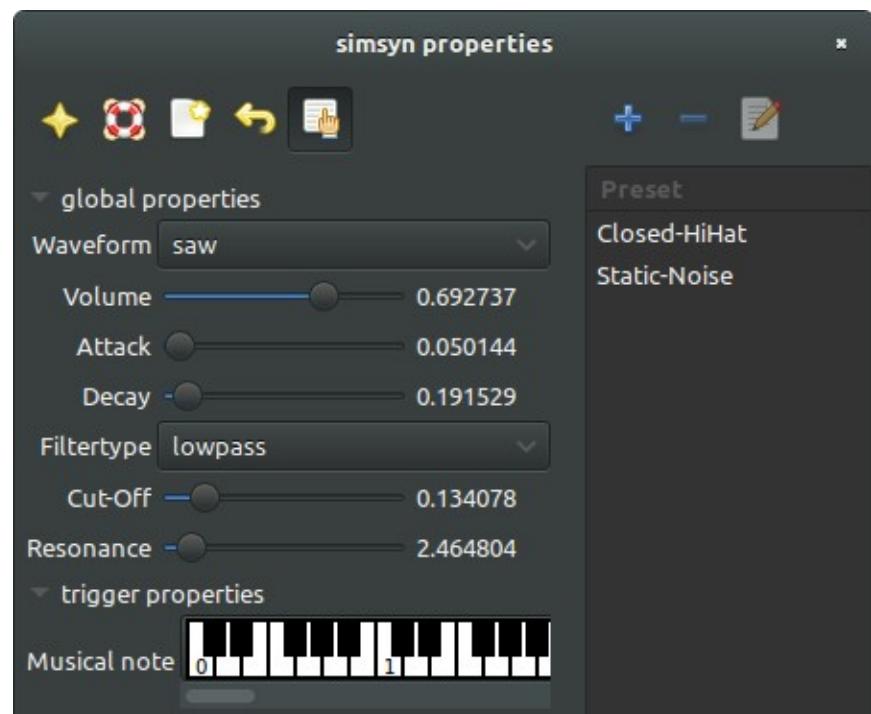
elements today

fx

- 360 LOC: audiodelay.c

synth

- 596 LOC: ebeats.c
- 270 LOC: simsyn.c
- 183 LOC: wavereplay.c
- 339 LOC: wavetabsyn.c



TODO

upstreaming

- tempo context
- audiosynth baseclass
- note enums?

more elements :)



<https://github.com/Buzztrax/buzztrax>

