

I've compiled ChinGG with Cuda; it's OK. It works with both "env CUDA_PATH=/opt/cuda" (according to Arch's wiki) and "export CUDA_...". It doesn't work with "setenv CUDA_..." (blocks the ./configure with an error).

I propose to modify the manual indicating that the default flag is set to "auto"; while if we want to compile with cuda we must add the "--with-cuda" flag. I also propose to change "setenv ..." to "env ...".

I noticed that the presence or absence of Cuda does not affect the rendering with h264-nvenc.mp4. I think it's obvious, but I thought nvenc was using cuda... I put the results of simple tests in the table:

Source: 36s video h264/mp4 52 MB

Use HW Device = none

RENDER	TIME _s	SIZE _{MB}	QUALITY
h264.mp4	15 s	38,2 MB	OK
h264-nvenc.mp4 (preset=medium)	8	9,1	Very bad
h264-nvenc.mp4 (no preset; qp=20)	8	94,9	OK

Use HW Device = cuda

RENDER	TIME _s	SIZE _{MB}	QUALITY
h264.mp4	16 s	38,4 MB	OK
h264-nvenc.mp4 (preset=medium)	8	9,1	Very bad
h264-nvenc.mp4 (no preset; qp=20)	8	94,9	OK

From these tests it seems that the default setting of h264-nvenc.mp4, i.e. preset=medium, leads to very small, but unacceptable quality, files. I suggest changing the preset to high or similar. Also the rendering time does not vary much when set to much higher quality (qp=20) even if the file gets much bigger.

Cuda plugins:

Mandelbrot and N_Body appear regularly, while F_scale_cuda and F_yadif_cuda do not appear; not even after a "reload plugins index".

N_Body works fine, no fps drops, instead Mandelbrot works without fps drops but no animations, just a still image of the fractal. Instead F_Mandelbrot works well with its animation in development over time.

It must be said, however, that even with Preferences set to "none" instead of "cuda", there is no lowering of fps. As if compiling cuda always makes it work, even when set to "none". Maybe this setting only affects playback and not effects?

Terminal output from CinGG session plus "reload plugins index":

```
Cinelerra: Could not set locale.  
Cinelerra Infinity - built: Feb 21 2020 08:52:52  
git://git.cinelerra-gg.org/goodguy/cinelerra.git  
(c) 2006-2019 Heroine Virtual Ltd. by Adam Williams  
2007-2020 mods for Cinelerra-GG by W.P.Morrow aka goodguy  
Cinelerra is free software, covered by the GNU General Public License,  
and you are welcome to change it and/or distribute copies of it under  
certain conditions. There is absolutely no warranty for Cinelerra.
```

```
FFMPEG::open_decoder: some stream have bad times:  
/home/paz/video_editing/prova/1080/ocra.png  
Decoder png does not support device type cuda.  
FFMPEG::open_decoder: some stream have bad times:  
/home/paz/video_editing/prova/1080/rodents.png  
Decoder png does not support device type cuda.  
Cinelerra: Could not set locale.
```

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Cinelerra Infinity - built: Feb 21 2020 08:52:52  
git://git.cinelerra-gg.org/goodguy/cinelerra.git  
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and you are welcome to change it and/or distribute copies of it under  
certain conditions. There is absolutely no warranty for Cinelerra.
```

```
init plugin index: /home/paz/cinelerra5/cinelerra-5.1/bin/plugins  
init lv2 index:  
LOAD: http://calf.sourceforge.net/plugins/Analyzer  
LOAD: http://calf.sourceforge.net/plugins/BassEnhancer  
LOAD: http://calf.sourceforge.net/plugins/CompensationDelay  
LOAD: http://calf.sourceforge.net/plugins/Compressor  
LOAD: http://calf.sourceforge.net/plugins/Crusher  
LOAD: http://calf.sourceforge.net/plugins/Deesser  
LOAD: http://calf.sourceforge.net/plugins/Emphasis  
LOAD: http://calf.sourceforge.net/plugins/EnvelopeFilter  
LOAD: http://calf.sourceforge.net/plugins/Equalizer12Band  
LOAD: http://calf.sourceforge.net/plugins/Equalizer30Band  
LOAD: http://calf.sourceforge.net/plugins/Equalizer5Band  
LOAD: http://calf.sourceforge.net/plugins/Equalizer8Band  
LOAD: http://calf.sourceforge.net/plugins/Exciter  
LOAD: http://calf.sourceforge.net/plugins/Filter  
LOAD: http://calf.sourceforge.net/plugins/Filterclavier  
LOAD: http://calf.sourceforge.net/plugins/Flanger  
LOAD: http://calf.sourceforge.net/plugins/Fluidsynth  
ALSA lib pcm_dsnoop.c:641:(snd_pcm_dsnoop_open) unable to open slave  
ALSA lib pcm_dmix.c:1089:(snd_pcm_dmix_open) unable to open slave  
ALSA lib pcm.c:2642:(snd_pcm_open_noupdate) Unknown PCM cards.pcm.rear  
ALSA lib pcm.c:2642:(snd_pcm_open_noupdate) Unknown PCM cards.pcm.center_lfe  
ALSA lib pcm.c:2642:(snd_pcm_open_noupdate) Unknown PCM cards.pcm.side
```

connect(2) call to /dev/shm/jack-1000/default/jack_0 failed (err=No such file or directory)
attempt to connect to server failed
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attempt to connect to server failed
ALSA lib pcm_oss.c:377:(_snd_pcm_oss_open) Unknown field port
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ALSA lib pcm_usb_stream.c:486:(_snd_pcm_usb_stream_open) Invalid type for card
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attempt to connect to server failed
fluidsynth: error: SDL2 not initialized
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ALSA lib pcm_dmix.c:1089:(snd_pcm_dmix_open) unable to open slave
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attempt to connect to server failed
fluidsynth: error: SDL2 not initialized
LOAD: <http://calf.sourceforge.net/plugins/Gate>
LOAD: <http://calf.sourceforge.net/plugins/HaasEnhancer>
LOAD: <http://calf.sourceforge.net/plugins/Limiter>
LOAD: <http://calf.sourceforge.net/plugins/MonoCompressor>
LOAD: <http://calf.sourceforge.net/plugins/MonoInput>
LOAD: <http://calf.sourceforge.net/plugins/Monosynth>
LOAD: <http://calf.sourceforge.net/plugins/MultiChorus>
LOAD: <http://calf.sourceforge.net/plugins/MultiSpread>
LOAD: <http://calf.sourceforge.net/plugins/MultibandCompressor>
LOAD: <http://calf.sourceforge.net/plugins/MultibandEnhancer>
LOAD: <http://calf.sourceforge.net/plugins/MultibandGate>
LOAD: <http://calf.sourceforge.net/plugins/MultibandLimiter>
LOAD: <http://calf.sourceforge.net/plugins/Organ>
LOAD: <http://calf.sourceforge.net/plugins/Phaser>
LOAD: <http://calf.sourceforge.net/plugins/Pitch>
LOAD: <http://calf.sourceforge.net/plugins/Pulsator>
LOAD: <http://calf.sourceforge.net/plugins/Reverb>
LOAD: <http://calf.sourceforge.net/plugins/ReverseDelay>
LOAD: <http://calf.sourceforge.net/plugins/RingModulator>
LOAD: <http://calf.sourceforge.net/plugins/RotarySpeaker>
LOAD: <http://calf.sourceforge.net/plugins/Saturator>

```
LOAD: http://calf.sourceforge.net/plugins/SidechainCompressor
LOAD: http://calf.sourceforge.net/plugins/SidechainGate
LOAD: http://calf.sourceforge.net/plugins/SidechainLimiter
LOAD: http://calf.sourceforge.net/plugins/StereoTools
LOAD: http://calf.sourceforge.net/plugins/TapeSimulator
LOAD: http://calf.sourceforge.net/plugins/TransientDesigner
LOAD: http://calf.sourceforge.net/plugins/VintageDelay
LOAD: http://calf.sourceforge.net/plugins/Vinyl
ALSA lib pcm_dsnoop.c:641:(snd_pcm_dsnoop_open) unable to open slave
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attempt to connect to server failed
fluidsynth: error: SDL2 not initialized
fluidsynth: error: requested set value for setting 'synth.midi-channels' out of
range
LOAD: http://calf.sourceforge.net/plugins/Vocoder
LOAD: http://calf.sourceforge.net/plugins/Wavetable
LOAD: http://calf.sourceforge.net/plugins/XOver2Band
LOAD: http://calf.sourceforge.net/plugins/XOver3Band
LOAD: http://calf.sourceforge.net/plugins/XOver4Band
LOAD: http://lv2plug.in/plugins/eg-amp
LOAD: http://lv2plug.in/plugins/eg-fifths
LOAD: http://lv2plug.in/plugins/eg-metro
LOAD: http://lv2plug.in/plugins/eg-params
LOAD: http://lv2plug.in/plugins/eg-sampler
error: failed to expand CURIE `xsd:float'
LOAD: http://lv2plug.in/plugins/eg-scope#Mono
LOAD: http://lv2plug.in/plugins/eg-scope#Stereo
FFMPEG::open_decoder: some stream have bad times:
/home/paz/video_editing/prova/1080/ocra.png
Decoder png does not support device type cuda.
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Decoder png does not support device type cuda.
```

(Jack errors aren't problem: I'm not started Jack server!)

There are no errors in the terminal; only the string appears:

GPU Device 0: "GeForce GTX 1660 SUPER" with compute capability 7.5