

All-in-one Composing with SynthFont2 and the EW music database

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I am an apprentice composer and I use **SynthFont2** together with the **EastWest music database** in order to get my initial compositions into public view. I want people to listen to my compositions, even download the audio files, the midi files and the music sheets. All this is done on a single computer at a reasonable cost.

If you have the time, please visit my website: <https://erickeller.ch>. Have a look around and see what I consider essential for promoting my initial steps in music composition. All that you can see on that site was created on just a single, fairly powerful computer.

Some composers do not need a studio – at least when they start up. They compose their music in a music composition program (like the freeware **MuseScore2** program), and then they build a credible music output with a high-quality music synthesis program. All this can now be done at a very low cost – once you have your initial, fast computer. This is a high-efficiency approach to creating a set of initial music pieces that are needed to break into the tough music world.

Doing it all alone

Can you or should you do it all alone? Before delving in, let's just check out this question.

Recording and distributing your work has traditionally been done by studios, agencies and record companies. In order to make money in a diminishing record market, these places are now concentrating on musicians that can give them “big sales world wide”. Individual musicians or composers that do not fit into their mould currently find it very hard to break into a commercially interesting scene.

But there are some of us creating music and wanting it to be heard.

The alternative to the “studios” is to do it all yourself. This can be done, but it is not always easy. If you find writing music hard, getting it “published” online in a concrete, visible manner may well prove to be yet harder. In my experience, only persons equipped to withstand long hours of banging their head against the wall are likely to succeed going the path entirely alone. All along, technical incompatibilities can cause frustrating and often longish delays.

I have done it that way, and this is why I am writing this introductory tutorial. If you've been to my website you understand why. My music is not at all in the popular mode, I am not overly rich, and hardly anyone knows my work. I simply had no choice.

Equipment

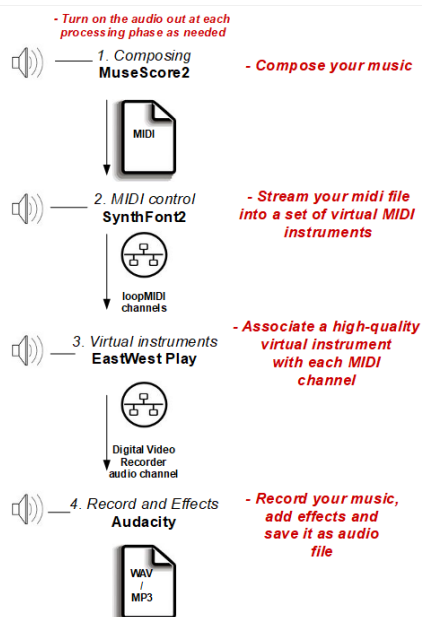
Here is what you need:

- You need a *fast and powerful computer* to do this work. Believe me, it really needs to be fast, have lots of memory and be connected to big disks. Also you need two or three screens to work comfortably. (I have a third, portable USB screen I got for

some 200 EUR). This is one place where you will need to spend some money. You'll be glad you did.

- Then you need the following programs. I'll tell you what I use, but good for you if you can find some other programs that can do the same or more. If so, do share. I use:
 1. **MuseScore2** for writing my compositions (free). It has everything that a beginner composer needs. I am very happy with it. <https://musescore.org>
 2. **SynthFont2**. Not entirely free but one of the best long-term investments ever. A very powerful and sophisticated program from Kenneth Rundt. <http://www.synthfont.com>.
 3. **loopMIDI**. Microsoft has taken internal midi processing out of the last few generations of Windows platforms. Thank goodness, there has been Tobias Erichsen who has dedicated years of free programming for providing one of the best possible solutions to this huge disgrace by Microsoft. Get this free program from <https://www.tobias-erichsen.de/software/loopmidi.html>.
 4. The way I understand it, you also need to install **virtualMIDI** to make the loopMidi program work. This free program is maintained by Claudio Nicola, another dedicated programmer that we are very grateful to. Find it here: <http://www.tobias-erichsen.de/software/loopmidi.html>
 5. Then you need a music synthesizer which goes way beyond a soundfont in terms of quality and variety of instruments. Here you have a certain choice. A few years ago, I chose the Garritan database as the best bang for the buck program. It was a good choice at the time, but the database itself as well as the control program had their limitations. In 2016, a large portion of the **EastWest database** has suddenly become available to the world with their \$25-per month subscription program, which makes it \$300 a year. (Ok, in Europe they will charge you 25 Euros per month). EastWest is the big player on the block. At 300 somethings per year, you've got access to the most sophisticated music synthesis program under the sun. After having worked for a few years with lesser offerings, there is no question in my mind that this was a deal that I could not avoid. You can get signed up here: <http://www.soundsonline.com>. Look for "composercloud".
 6. Finally, you need good and trusty **Audacity**, your free audio processing program from <https://sourceforge.net/projects/audacity/files/>.

Let's put it together



My basic chain is this:

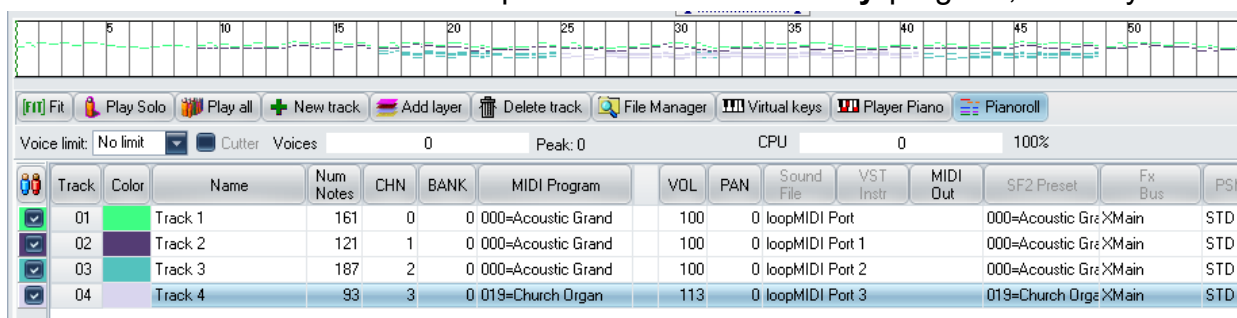
Stage 1: Composing with MuseScore2

- I write my compositions with **MuseScore2**. The best all-around sound font has been FluidR3-GM2-2.sf2. I've found that the piano in that soundfont has a very clear tone that lets me hear my chords as well as well as my errors. At the end, I print out the score as a pdf and as an MP3 and discuss the result with my teacher.
- To prepare the composition on the website, I set up the following chain: **MuseScore2** → **SynthFont2** → **EW Play (EastWest)** → **Audacity**.
- **MuseScore2** → **SynthFont2** is easy. Simply save your work as a standard MIDI file and read it into

SynthFont2.

Stage 2: MIDI Control with SynthFont2

- For the **SynthFont2** → **EW Play** link, you need to install **loopMIDI** and **virtualMIDI**. Restart your computer after the installation. You may wish to reserve 3-4 MIDI channels at computer start-up, but don't worry about it, you can always change it later with the loopMIDI task tool. From now on, your computer will maintain these MIDI channels.
- You may wonder at this stage whether you need to change the MuseScore2 instruments for outputting. The answer is no. Don't worry yet about specifying certain output instruments at the SynthFont2 level, the instrument choice will be handled at the EW Play stage. For example, you can do your composing with the MuseScore2 pianos, and end up using flutes at the EastWest Play stage.
- Load your midi file into **SynthFont2**. You can play it in the usual way using a soundfont. To channel the output to the **EastWest Play** program, select your midi



channels with the “MIDI Out” button on the task bar. You will see that the loopMIDI ports are available.

- Once you've made your assignments, save your setting as an “Arrangement” in the File menu. The SynthFont2 program will remember the place where your midi file resides as well as your settings.

Stage 3: Virtual Instruments with EastWest Play

- Now open the **EW Play** program. Open the Settings menu. The MIDI tab shows the loopMIDI ports. That is where the sound will feed into the EW Play program. Under the Audio tab, you will find the usual Windows audio settings. I recommend: use 48 kHz, because with 41 kHz an unpleasant background noise will be generated that comes from the conversions between 48 and 41 kHz. Leave the Device Type on DirectSound and for initial testing purposes, specify your normal speaker as an OutputDevice.
- For the next part, I shall suppose that you have subscribed to EW composercloud, and that you've downloaded at least one instrument in question. I personally went the whole hog and downloaded the most immediately important databases, which are the three pianos (Bechstein, Bösendorfer and Steinway), the EW Symphonic Choirs Gold and the EW Symphonic Orchestra Gold Complete, plus a few other goodies.
- Also to be sure, I use a 64-bit Windows computer. All recent work on the EW database has been in 64 bits. Work with less recent databases and fewer parameter modifications is possible with 32-bit computers using **EW Play 4**. In my case, I use **EW Play 5** on an Intel i7 with 16 GB installed RAM running at 2.9 GHz.
- Now choose your instruments – carefully. The manual will be a good guide because a perfectly good instrument can give you awful results if you use the wrong database choice recorded with inappropriate settings. As an example, the *Goodnight Hymn* on my website was created with the instruments shown in the

illustration below. Other settings gave unsatisfactory results. Notice four midi channels, each for a different instrument or voice.



- Now click the arrow in SynthFont2, right above the wave display. You should hear the synthesized sound through the EW Play program.

Stage 4: Record and Use Effects with Audacity

- You got that? Perfect. Now we want to save the music to a file. For that, launch **Audacity** and select “Digital Video Recorder” as your input audio channel. Also in EW Play, change the Audio setting Output Device to “Digital Video Recorder”. The audio from EW Play will now be transmitted to Audacity via that channel.
- The price to pay: you won't hear a thing while the sound is being recorded. But that's no great loss, because you'll see the cursor move in SoundFont2 and you'll see the sound arrive in Audacity.
- And voilà. You simply save the file in one of the many ways that Audacity offers.

The EW VST

When you install the EW Play, it also deposits a 64-bit VST in this location: C:\Program Files\vsplugins. It's called **play_VST_x64.dll**. Wouldn't it be a great idea to load this into SynthFont2 or into some other Digital Audio Workstation (DAW) program like Ableton Live? This would avoid all the internal re-cabling, and it would let us work with a single, powerful DAW program. The EW VST has all the features of the EW Play program, minus some input-output capacity.

Sounds good, but reality teaches us otherwise. First **SynthFont2** can currently only work with 32-bit VSTs, so the SynthFont2 idea is excluded for the moment.

Then, my own experiences with plugging the EW VST into Ableton Live 9 (which supports 64-bit VSTs) have been consistently disappointing. With the help of support at EastWest, I was able to get their VST working within Ableton Live, but Ableton's input-output support of the VST is very limited: you have to set up the EW VST *before* loading in the midi file and then you can no longer change the setup parameters. In addition, I wasn't able to get more than three midi channels to work -- so that's been a total loser. Bach's fugues etc. easily have eight or more midi channels, so what is one to do?

The setup I describe here is much better, because when you have listened to one version, you can change the instrument parameters in EW Play easily without changing the basic setup. There is a mixer and there are loads of parameter adjustments in EW Play, so you can experiment for hours with the same composition till you get the best possible sound.

Finally, I asked EW if they were planning to add a MIDI input and an audio output to EW Play, and the answer was negative. They said “**Play** is just a software built to load up the instruments. We are continually working to improve it, but the focus is more on the functionality of it as a software instrument to be integrated with a DAW for recording/mixing/mastering, rather than trying to do everything. DAWs just have so much more development/staff/time/money invested in that side of things.” (answer received in November 2017).

Absolutely, but then the VST – DAW interface must also be able to support strong interactive work, and so far, I haven't seen that.

Processing Effects Caution

With all the wonderful processing effects that are now available, one is tempted to “perfect” one’s creations with compression, high/low filtering and reverberation. However, the expert consensus opinion suggests great caution, particularly when dealing with high tones in flutes, piccolos and voices.

For example, the very high soprano singing found in my “Goodnight Hymn” did not permit any effect processing because of the digital sound resampling performed in the subsequent m4v conversion needed for the video version. Sometimes I’ve found it useful to “fatten” lower tones of pianos a bit, but I leave high tones unaffected. The EastWest engineers have done a very good job of providing high-quality sound directly from their database, even for the hard-to-handle high tones.

For the Lazy all-in-one Composer

And here is a script to launch all the three processing programs in one fell swoop. Save it as a batch program, e.g. as “LaunchSF_EW_AUD.bat”:

```
@echo off
cd "C:\Program Files (x86)\SynthFont2\"
start SynthFont2.exe"
cd "C:\ProgramData\East West\"
start play_x64.exe
cd "C:\Program Files (x86)\Audacity\"
start audacity.exe
```

Summing up

I am very pleased with the current situation of all-in-one composing. After years of feeling excluded from the best possible music production possibilities, just because I could not afford certain top-notch programs, the current situation has suddenly changed. As a simple composer, equipped with a few key programs, I can now build truly credible, possibly even impressive pieces of music with the very best virtual orchestras in actual existence. It’s a great moment to do some serious composing.