

**Interview w/ Sven Junge, Gerhard Lengeling, & Chris Adam of Emagic**  
*by: Ted Perlman for COMPUTER MUSIC Magazine (CM)*

From their founding in 1992 by Developers Gerhard Lengeling, Chris Adam, and Company President Sven Junge, Emagic have continually been at the forefront of innovation in musical software development. Before there was a "Logic", there was "C-Lab Notator", the product developed by Lengeling and Adam. It was the first sequencing program to include a full scoring section. Now you could print out what you had played in and actually give it to other musicians to play, even if you couldn't handwrite it out yourself. C-Lab was developed on the Atari, but when they founded Emagic they immediately set out to develop the most cross platform program ever made. Their concept of Logic having a standardized foundation that could be layered with platform-specific upper layers was simply revolutionary at the time, and has continued to be so. The company also is unique in having almost 90% of their employees being musicians themselves. They really do use their own products. It is no small feat that Emagic can count as users some of the biggest names in the music business in many different mediums - music, film, television, and live concerts. "Logic" is a regular visitor to the "top ten", and I'm sure will continue to dominate the "pro user" end of the marketplace. With a recent push to bring more beginning users into the Logic fold, it is conceivable that there will be a time in the future when all hits will have been recorded or edited with Logic. Well maybe not all, but definitely most... I hope to be among that group. I sat down and spoke with the three founders of Emagic recently, and they shared their insights on various topics that are of interest to all computer musicians.

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**CM:** *What do you say to the reputation of Logic being "deep", "complicated", and "hard to learn"?*

**Sven Junge:**

It is a public myth that originates from the early days of Logic. Today, using Logic isn't any more difficult than driving a car. Seriously, it is a very powerful application and, just like with any professional tool, you have to be ready to spend a few days learning how to use it. Once you've got the idea, Logic's ease of use and versatility is addicting - and once you have figured out how to drive Logic with a Logic Control you will fully realize the sheer elegance and user-friendliness of this system

**CM:** *Many users complain that the manual and the program are too complicated - who writes your manuals? Do you think Logic is harder to learn than, say, Cubase or ProTools?*

**Lengeling/Adam:**

I do know the "learning curve myth" about Logic but I think that it is not entirely accurate. On the other hand, it is correct to say that a user does need to invest some time in order to learn all the possibilities of Logic; that is no bad thing, as the return on that investment is very high. And I do not think that Logic is a complicated application per se; rather, Logic is a very powerful application. If you consider the power and options on offer, I think Logic is no more complicated than the tasks it is designed to perform.

**CM:** *Do you actually use the program yourselves? What are your favorite features?*

**Lengeling/Adam:**

As I mentioned earlier, most of us who use Logic are musicians, DJs or producers. I personally have been writing MIDI applications like Creator and Notator since 1982, and at that time I had already been a keyboardist in bands for almost 10 years. Probably 90% of all Emagic developers are musicians, and many of Emagic's employees have a very similar history. We all use our own stuff and we simply like what we do. Possibly this is a reason why we work so intensely. My favorite feature is currently the new Track Automation; probably because I have personally worked on that very intensively for almost two years now... ;-)

**CM:** *You guys started out by creating C-Lab Notator. How much of Notator has survived in the current version of Logic?*

**Lengeling/Adam:**

Regarding the specific code, almost nothing, because that was specific code for the Atari. Regarding the concept, a lot. Creator in 1985 (Notator without the scoring section) was revolutionary regarding realtime operation - edit while playing - unheard of at that time. Today Logic is still unique regarding its realtime possibilities. You don't have to stop for any function. This is a given for Logic users - but it certainly isn't generally.

**CM:** *Are you planning on promoting Logic to more potential "amateur" users out there, or are you satisfied with the large pro user base you have cultivated so far?*

**Sven Junge:**

A comprehensive and carefully-structured range of Logic products, known as the "Metal Series" (*editor: Logic Platinum, Gold, Silver, and MicroLogic*) has been available since 1998, and it includes an ideal Logic version for everyone from amateur to professional. We have always been, and still are, convinced that developing and marketing from the top down is the best option for Emagic in the MI market. Consequently we have built a large pro user base first and we are now looking forward to welcoming the next generation of upcoming amateurs.

**CM:** *Logic is the most cross platform program of any of the majors. How can Emagic put out releases that are as stable on the PC side as they are on the Mac side? It seems impossible to do?*

**Lengeling/Adam:**

It has been part of the concept of Logic right from the very first moment. In my personal history, some important applications like Supertrack on the C64 and Creator/Notator on the Atari simply died with the platform. They were all good - and very successful - products that were nevertheless totally platform-dependant applications. Bad luck. After that lesson, I decided in 1990 to write a complete new application - Logic - which is split into a major cross-platform core and a smaller platform-dependant layer. Especially since version 4, I have been very happy with the result. Logic performs very well on all important platforms nowadays, while the feature set is practically identical. We're

justifiably proud of this, and I do not know of any other application, in the music business or elsewhere, of which this is true.

**CM:** *How do you respond to allegations that Emagic always has had a "slant" towards the Macintosh platform as opposed to the PC? If not true, why is there never a PC shown in any of your magazine ads - it is always a Mac.*

**Sven Junge:**

Most of what Emagic does reflects the needs of our customers and it is no secret that the majority of professional musicians, producers and studios rely on Apple machines. It is also no secret that Emagic has the most advanced cross platform development strategy of all music software companies. Anything we develop and release on the Mac will be released on Windows with exactly the same feature set a few days later and, of course, vice versa. When it comes to our ads, I freely admit that we have used Mac most of the time. There are two simple reasons for that: 1) In our opinion, Apple computers are the best looking, and 2) none of the VIP users we featured in our 2001 ad series uses a PC. Consequently we showed the machines of their choice. I can also tell you that our future ads will include more PCs...

*Why does the price of Logic remain so high?*

**Sven Junge:**

Logic Platinum is our flagship product and it is one of the best realtime applications of its kind, regardless of price. Compare its price with other software packages for video editing or graphics, or with some of the higher priced TDM plug-ins, and you will find that the price of Logic Platinum is very, very reasonable. It includes more than 50 high-quality plug-ins, too. Besides that, we always have to consider our ever increasing R&D and service efforts that are required to stay ahead of the game. And then, there are still the more affordable Logic versions that I mentioned before...

**CM:** *Those are some amazing plugins included in Logic. Tell us about who writes them? What new plugins is he working on for the future?*

**Lengeling/Adam:**

All (*included*) plugins are an Emagic development. Steffan Diedrichsen is the major head behind the Version 4 plugins, but there are also other talented people developing them, like Dr. Markus Sapp.

**CM:** *Emagic announced the implementation of direct disk streaming audio last year in its software sampler, the EXS24, then abruptly announced it would not happen. What exactly happened to this feature? How is Emagic going to implement an alternative method of disk streaming?*

**Lengeling/Adam:**

We implemented a different solution, making use of the Virtual Memory capabilities offered for many years by Mac and Windows computers. In this case, we call it "Virtual Sample Memory". Unlike HD-Recording/playback or Gigasampler, the MacOS VM and also the VSM Manager for the EXS are not performing a constant streaming from disk.

The VSM Manager has a smart algorithm for keeping "most recent data" and swapping out "data that is not used anymore". If you are using the VSM Manager with, for example a 50 MB piano sampler instrument, it is very likely that after playing a while everything is loaded completely into the computers RAM and kept there. Then it is like without using VSM. Apart from the constant RAM the VSM Manager is using, additional RAM is dynamically allocated by the VSM Manager depending on the structure of a sampler instrument mapping. In addition nowadays I think that the RAM prices are low enough that everyone simply should buy enough RAM. In this case the user gets maximum performance while avoiding the performance penalty generally introduced by any kind of Virtual Memory or Streaming technology.

**CM:** *How did the collaboration with Greg Mackie, the new "Logic Control", come about?*

**Lengeling/Adam:**

We had been investigating hardware controller options for a long time. Mackie was a natural choice with excellent hardware, as well as specific experience in this area. Mackie has been an absolutely ideal technology partner, and we had very good discussions when it came to defining the feature set.

**CM:** *SoundDiver is one of the best editing programs on the market today - do you guys write that program yourself or is there an Emagic employee who personally oversees it?*

**Lengeling/Adam:**

The man behind SoundDiver is Michael Haydn. I have worked with Michael for 15 years now, and he has been an Emagic employee for a long time. While I am convinced that SoundDiver will continue to be the most complete sound librarian and editor, the market for external MIDI sound devices is not growing.

**CM:** *Do you think there will ever be a time in the future when ProTools will not be the dominant hard disk system in Pro Studios?*

**Sven Junge:**

Especially when it comes to the process of music creation and production, our industry is very much driven by technology. It only took some 20 years from multitrack tape machines to jet plane compatible music production suites in a laptop including more than 48 tracks of audio, software instruments, a vast variety of effect plug-ins and much more. Naturally, the changes won't stop here and we at Emagic are grateful to be positioned at the cutting edge of the technological evolution. We don't think in terms of market dominance but rather in terms of price/performance value. I have personally worked with Digidesign since the days when they had a staff of 6, and Emagic will continue this traditional cooperation for the benefit of tens of thousands of users worldwide. Digidesign gives us full technical support and I believe that both companies can only benefit from this professional business relationship.

**CM:** *Do you think Logic has to add every feature that Cubase or other music programs implement?*

**Lengeling/Adam:**

Logic is already a very complete application regarding the feature set and can consequently be favorably compared with many other applications, depending on the context. It is our concept to make Logic the best application available for the entire production process, from writing and recording through to mastering. Logic is not perfect - yet. We are working on it... ;-)

*CM: Do you see closer relations with Steinberg in the future, ala the co-operation between the two in implementing the VST technology into both programs.*

**Sven Junge:**

No.

*CM: How did you manage to make the new softsynth, the ES2, so "analog and fat sounding"? You've completely obliterated the old adage "digital sounds thin and sterile". How did you emulate analog filters so effectively?*

**Lengeling/Adam:**

This has to do with the completeness of the emulation, including all the specific characteristics of the analog elements, as well as avoiding digital artefacts. Aliasing artifacts decrease the sound quality. In theory, if everything is done the right way a Virtual Synthesizer must sound better because it can do everything an old synth can do - but quicker and with better quality.

*CM: Which one of you guys invented the hated copy protection dongle? It seems to be the #1 user complaint.*

**Lengeling/Adam:**

We hate the fact that copy protection is even necessary. It would be much better for both users and manufacturers if everyone would simply pay for the meal he is enjoying. By the way, the number #1 user complaint is not the dongle; it is the CD copy protection. This will change in 2002 because Logic version 5 comes with a new Emagic Key which functions in an entirely different way.

*CM: Does Emagic plan to release any more hardware soundcards?*

**Lengeling/Adam:**

The immediate successor to Audiowerk8 is the EMI 2|6, and there will be more audio hardware from Emagic in the future. Our main concept, however, is to make Logic as good as possible and to support as much other hardware and software as possible, no matter if the hardware is delivered by Digidesign, Motu, or RME, just to name a few. Our users should have the freedom to pick the hardware they like. Emagic has a great history of supporting as many hardware, software and other standards like MME, OMF, OMS, VST, TDM, DAE, REX, QuickTime, and dozens more.

*CM: What do think of the current competition between Intel and AMD? Does Logic support both chips?*

**Lengeling/Adam:**

You cannot lose. Both current Intel and AMD processors are just great. It is a head to head race. Logic has optimizations which apply to both processors. The same is true for the Apple G4.

*CM: Thank you very much, Gentlemen. You are truly 3 of the most creative and innovative voices in the music business today.*