Behind The Gear
This Issue’s Renderers of Reaper
Justin Frankel & Christophe Thibault
by Scott Evans

Justin Frankel has always pushed
the envelopes of music and software.
In 1997 he dropped out of college
to release Winamp and found Nullsoft, which
was later sold to AOL. Justin started
a new company, Cokko, and began work on
a DAW called Reaper. Since then Reaper has
grown up to become a solid contender in
the DAW market, powered by a development
philosophy and style that would never fly
at most big software shops. I talked with
Justin and Cokko co-owner Christophe
Thibault at their San Francisco office.

Why would anybody start writing a DAW
in 2005?
JF: It grew out of frustration with the existing software
that I’d tried to use. My career is as a programmer,
but a few years before [Reaper], I started playing music
for fun. Christophe turned me on to Vegas – I think it was
Vegas 4.0. I used it for a while, and got a little annoyed
with some of the limitations it had for audio. At a
certain point I decided that I would like to have control
over the environment I would work in to make music,
and I started making my own, just for fun. It kinda
grew from there.

Was it just you at the time?
JF: Initially, and Christophe joined in 2006.
I remember reading about Reaper
back then. The product was evolving
very quickly.
JF: We were pretty productive. If you look back at what
we’ve done in the last four years, given the number of
people involved (which at this point is up to three)
we’ve definitely come a long way.

Other DAW companies are easily 10, if not
100, times as big as yours.
JF: Yeah. Our overhead is really low, and because we’re
making software, we don’t have per-unit costs. We can
take the time and do things right. We don’t have a big
machine that we need to support and we don’t ever
need to push out new releases in order to increase
revenue. We own the company, so we’re only
accountable to ourselves. In that sense we don’t
compromise the product or the way we treat users
in order to meet some arbitrary goal. There’s also an
emphasis on keeping it so we don’t have to deal with
additional bullshit, which is easier when you keep

things small. As a developer, being able to build
everything quickly and easily is important. Being able
to update the website and post builds online for people
is important. If our program was a gigabyte [in size],
say we included a ton of samples, a lot of things
wouldn’t be possible. This is a good example – in
software development, there’s something called QA,
which is quality assurance. The big company process is
that you have elaborate QA processes where you test
all kinds of different things for every release. It’s
somewhat effective, but in software, there’s just so
much complexity, so many states things can be in, that
anyone who thinks QA is even north of 50 percent
effective is delusional. You are never going to come
close to getting all these states tested. So you try, and
you waste a ton of time and effort testing things,
which then slows down your release cycle, and slows
down development as a result. It ends up decreasing
the efficiency of the process for some margin level of
effectiveness, and it’s mostly a cover your ass sort of
measure. We obviously do some internal QA, but for the
vast majority we rely on a group of testers who test
builds when we add new functionality.

So you have users who are willing to be
ongoing beta testers?
JF: Users who are psyched to be using a latest
and greatest feature and to give feedback suggesting how
things should be. It’s open – anyone who wants to do
it can. Generally speaking, it is more effective than any
QA process I’ve ever seen in a corporate environment,
and it’s much more efficient.

A big aspect of Reaper seems to be your
relationship with your users, versus
the way users are probably accustomed
to being treated by large companies.
JF: That’s something that we’ve felt strongly about from
the beginning, and it’s something I felt when I started
my first company – which I then lost control of and sold.
I saw a good example on the Reaper
forums. Someone was talking about
UI in the Mac port being un-
responsive. You said, “Hey, I’m
not seeing this. Let’s talk about
it,” and there was some back and forth. Then a
few days later, you posted, “Here’s a
patch. We rewrote a ton of the Mac UI
painting code,” and everyone was
like, “That fixed it all. Thanks!”

JF: Yeah, that is not unusual.
That is unusual.
JF: [laughs] Fair enough. I think our users appreciate
that, and as a result we have a fantastic user forum.
There are so many people on there who are really
awesome. It’s something you don’t see very often
on the Internet. Newbies come in with questions and
people help them out. Our new contractor was saying
that in a few weeks, the newbie that got help then
ends up helping someone else out.

Do you have any idea how many people
are using Reaper?
JF: It’s hard to quantify. We’ve tracked downloads at
different times. I think the last time we checked, we
guess maybe a hundred thousand people really used
it on a day-to-day basis.

The general consensus seems to be that
these days all DAWs are roughly
equivalent. Would you say that’s true
about Reaper?
JF: “In what way?” would be the question. You could say
they’re equivalent in terms of their very basic capabilities.
You could say they all mix things to sound roughly the same.
That’s fair. If something doesn’t mix things the same as other software, then
it’s either a bug or a feature, depending on how you
want to market it. I wouldn’t say they’re the same,
because Reaper does a lot of things that no other
software really does at all.

Such as?
JF: The biggest one that I am continually blown away by
is that no other software supports vari-speed recording
or playback.

I’ve noticed that!
JF: It’s 2010! Analog tape machines did that before I was
born! What’s up with that? We have really good routing
flexibility. You can create entire complex setups. It’s
like having a patchbay and a ton of effects that you
can wire any way you want. Even within each track you
can have 64 channels, so you can load up a bunch of
effects and route the outputs of one to the inputs
of other and that sort of thing.

CT: When you asked, “Why create a DAW in 2009?” – that
is why. We can design in a new way.

So the ability to start your architecture
from ground zero, with no crut.
JF: It’s a huge advantage. If we had to write for hardware
10 years ago, let alone 20 – a lot of stuff we can do
now, we wouldn’t have been able to do. It wouldn’t
make sense.

Can you talk about the Mac version of
Reaper?
JF: We started out developing for Windows, but pretty
early on it was clear that people wanted a Mac version.
So we’ve been working on it. It was originally posted
to the website as a beta in October 2008, and we
dropped the beta tag in March. It’s constantly being
improved, and we’re at the point now where it’s almost
at parity with the Windows version. Part of the
problem is Apple’s developer documentation. They
break things in new versions of the OS, and add new
features that make things faster but that aren’t
supported in the older versions. Programming for the
Mac is pretty much a nightmare.