
Subject: OT: Request for Nuendo and/or Samplitude users

Posted by [Dedric Terry](#) on Fri, 07 Apr 2006 02:39:47 GMT

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Anyone with Nuendo and/or Samplitude (or the demo) interested in a little experiment? There has been a hardware test thread on the Nuendo forum that is claiming RME drivers are way less efficient than Lynx and MOTU - okay, worth reporting to RME, as long as it's really RME and not Nuendo, but that part seems to be taboo on the Nuendo forum, so I bailed on posting this there.

So, for fun, or out of frustration more likely I decided to compare Nuendo 3.2 to Samplitude 8.11 (demo) using my RME Digiface (2.94 drivers, latest full release). I loaded up a single sine wave, copied it to 96 tracks, just to load the audio engine (don't care about disc streaming). I loaded 8 Gsuite JCM900s (freeware) on the first few tracks and here's what I found, and what I would like to confirm with other users:

At 64 sample latency:

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(X2 4400 dual core; A8V Deluxe; 2G Ram; RME Digiface 2.94; etc)

Holy crap - that's over twice the performance. So, does Sam8 not have PDC at all? I know Nuendo has a long list of other features, such as audio warp, scoring, midi and VSTi capabilities beyond Sam's, post features, etc, etc, but that's over twice the performance. I know Samplitude handles it's own audio buffering internally, which seems to be completely independent of ASIO buffers, and to some degree seems to ignore ASIO buffers too. At 128, Nuendo caught up - 39 JCMs. I have no doubt that there is a "sweet spot" for DAWs, simply based on how they buffer, process and stream data, in what sizes, etc, so optimal ASIO or internal buffer settings won't be consistent on different systems, and certainly not between apps, but this seems to be an extreme difference (I triple checked the test to be sure I wasn't missing something basic, but couldn't find anything. Samplitude's VIP buffer was at 2048).

Now, not being a Samplitude user, here's my lack of knowledge - that's all I could get out of it at any latency in the RME card. Nuendo kept adding more - over 64 at 512 samples. Why does Samplitude seem to gain nothing from higher latency at the audio card? I'm sure I'm probably missing something in understanding Samplitude's buffer approach (I did tweak the VIP buffers to 8192 to get 38 plugins at 512 samples on the RME, but it seemed to lose a little performance at higher RME latency - not what I would expect).

The other side of this is Nuendo has low latency issues. This was run with

"Low Latency" off in expert audio settings. With it on, it wouldn't even run the 96 instances of a single audio file, no plugins, without breaking up - given what it is supposedly for, that can be reasoned away, but something about Nuendo's PDC doesn't seem right to me - "disabling" it didn't add a single plugin to the test results. Nuendo also needs to be restarted when lowering latency settings or runs much worse than if restarted, and it is slow to reset the audio engine.

I'm trying to get to the bottom of some longstanding questions I've had about Nuendo's performance since 3.0, and also since 3.2. Something isn't right. Any takers to dive into sorting this out?

The Nuendo forum is too volatile right now. Posting this would just cause a flame war and I'm in no mood to get burned. I'm not partial to any manufacturer - just figuring out where the weak spots are.

Thanks!
Dedric

Subject: Re: OT: Request for Nuendo and/or Samplitude users
Posted by [audioguy_editout_](#) on Fri, 07 Apr 2006 05:57:54 GMT
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I can do some NU3 tests for you tomorrow if you like.

David.

Dedric Terry wrote:

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> Thanks!
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Subject: Re: OT: Request for Nuendo and/or Samplitude users

Posted by [Dedric Terry](#) on Fri, 07 Apr 2006 06:28:07 GMT

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Thanks David! What audio card(s) do you have? What are your system specs?

The test is pretty basic, but will give me an idea of comparative driver performance - just an sine wave (100Hz will do) stereo audio track; copied to 96 tracks; loop about 10 seconds or so of it at zero crossings.

Put JMC900 in all 8 inserts of a track and copy that to another 2 tracks, with all plugins disabled. Run at 64 samples with "Low Latency" off in expert audio settings and enable plugins until Nuendo starts sputtering or crackling. Record the count when it can loop over a 10 second or so segment 4-5 times without sputtering. Repeat at 128, 256 and 512 sample latency. Also try a run at 64 with "Adjust for Record Latency" off, and the Constrain PDC button on, just for curiosity - probably won't make any difference (the first setting shouldn't at least).

The ideal scenario is to compare Nuendo to Samplitude on each system, but if you don't have time to load the Sam8.11 demo, or if you don't have it, no problem. Different systems will perform differently, so comparing systems isn't of as much value as comparing an audio driver on a single system between N3.2 and Samplitude 8 using the same plugins, audio files, and ASIO driver latency. I'm going to load the Sonar 5 demo tomorrow and give it a try too.

Thanks!
Dedric

On 4/6/06 11:57 PM, in article 44360119@linux, "Dave(EK Sound)" <audioguy_editout_@shaw.ca> wrote:

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> Dedric Terry wrote:

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>> Dedic
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Subject: Re: OT: Request for Nuendo and/or Samplitude users
Posted by [LaMont](#) on Fri, 07 Apr 2006 14:39:39 GMT
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Hey Dedic,

Well it seems that you've finally come to point where I've been stating for a while. I'm not as scientific as you are, I'm more of the "i don't why, but this is the way it it" :)

I'll go further, being an early adopter to the Nuendo platform(version 1.1)I would say that Nuendo 1.5 (too me) was the sleekest, best sounding version to come along..

My uneducated guess as to why Neundo 3.x is not as effiecient as Samplitude, is due to the following:

-Summing mixer Algorithm(32 bit float)-after 40 tracks, with plugins things starts getting weird soundwise.

-Warp engine..It has always hindered Acid's sound quality, why not Neundo's?

-Vst performance: right now with the way that Pace is integrated in the application, I must say that running the "crack yields way better results in work flow..
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Dedic Terry <dterry@keyofd.net> wrote:

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Subject: Re: OT: Request for Nuendo and/or Samplitude users
Posted by [Dedric Terry](#) on Fri, 07 Apr 2006 17:10:03 GMT
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Hey Lamont,

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The point really is that Nuendo isn't performing as I would expect, esp. at low latency. Some Nuendo users think RME drivers are to blame, but my Samplitude tests tell me otherwise.

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"LaMont" <jjdpro@ameritech.net> wrote in message news:443679ab\$1@linux...

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Subject: Re: OT: Request for Nuendo and/or Samplitude users
Posted by [LaMont](#) on Fri, 07 Apr 2006 18:17:50 GMT
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I agree with you..it's not RME and it's drivers. I have an Digi 96 PST card and it's very fast on Samplitude,Gigastudio, and others..

To me and other SX users, things got slow and the sound changed when we update to 3.x

Let's face it, SX/Nuendo has a lot of over-head in the app..You can almost feel it. it's avery powerful app. Samplitude on the other hand is a hybrid vst app. it's always been sleek and fast. When customers demanded vst integration, vst was an addon, not a total "infusion" that samplitude fully depends on.

Anyway, to my ears Samplitude is the best sounding DAW/editor on the market. I master with it exclusively. That's not saying anything bad about SX/Nuendo..

"Dedric Terry" <dedric@echomg.com> wrote:

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Subject: Re: Request for Nuendo and/or Samplitude users
Posted by [Bill Lorentzen](#) on Sun, 09 Apr 2006 01:49:11 GMT
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You might want to compare features in Sequoia with Nuendo. Sam and Sequoia are the same sort of relationship as Cubase and Nuendo. Sequoia has more post production features as I understand it. I use Sam.

Sorry I don't have time to try any testing.

Bill

"Dedric Terry" <dterry@keyofd.net> wrote in message
news:C05B2D13.2671%dterry@keyofd.net...
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> Detric
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Subject: Re: Request for Nuendo and/or Samplitude users
Posted by [Detric Terry](#) on Sun, 09 Apr 2006 02:50:58 GMT
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Thanks Bill. I was thinking the same as far as features, but no demo for Sequoia (not surprisingly). I may have another option to evaluate it anyway.

For audio engine/driver performance though, there shouldn't be any difference, but I'll have to get Sam7/8 to get on the forum to actually find out from the developers.

No problem on testing - I know everyone here is busy.

Regards,
Detric

On 4/8/06 7:49 PM, in article 443869de@linux, "Bill Lorentzen" <bill@lorentzen.ws> wrote:

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> the same sort of relationship as Cubase and Nuendo. Sequoia has more post
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Subject: Re: OT: Request for Nuendo and/or Samplitude users
Posted by [audioguy_editout_](#) on Wed, 12 Apr 2006 05:25:45 GMT
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Hi Dedic,

Sorry, I haven't had time to run these tests... I haven't forgotten about you! It is a zoo at the office right now... as soon as time permits, I will do the tests and forward the results.

Regards,

David.

Dedic Terry wrote:

> Thanks David! What audio card(s) do you have? What are your system specs?
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> The test is pretty basic, but will give me an idea of comparative driver
> performance - just an sine wave (100Hz will do) stereo audio track; copied
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> Thanks!
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> On 4/6/06 11:57 PM, in article 44360119@linux, "Dave(EK Sound)"
> <audioguy_editout_@shaw.ca> wrote:
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>>I can do some NU3 tests for you tomorrow if you like.
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Subject: Re: OT: Request for Nuendo and/or Samplitude users
Posted by [Dedric Terry](#) on Wed, 12 Apr 2006 05:41:29 GMT
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Hey David - no problem. Real work comes first.

Thanks!
Dedric

On 4/11/06 11:25 PM, in article 443c9109\$1@linux, "Dave(EK Sound)" <audioguy_editout_@shaw.ca> wrote:

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