
Subject: ASIO DRIVER current status ?
Posted by [Dimitrios](#) on Thu, 27 Jun 2013 15:04:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dear Mike !
I am still using XP 32bit but the ASIO is much needed to work Paris hardware with Cubase 5...
Any update regarding the current status of your work if any progress ??
Thanks a lot for all that you do for Paris !!
Regards,
Dimitrios

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 26 Jul 2013 13:33:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Dimitrios,

The ASIO project has been on hold while we moved and I get caught up on work. But, I'll be back at it in August.

Cheers!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Exhale](#) on Fri, 09 May 2014 15:27:52 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello, Mike.

What is the situation today with progress regarding asio driver ?

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 09 May 2014 16:41:52 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm actually working on it right now. I've had a bit more time to work on it lately, and I'm optimistic that will continue.

It's had a major re-write. I'm still debugging the changes. The next step will be more UI work for the control panel.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sat, 10 May 2014 14:44:21 GMT

[View Forum Message](#) <> [Reply to Message](#)

I'm not sure if this kind of update is helpful, but I fixed a bug yesterday that has been in the driver from the start. If I read the code right, the ASIO driver could never record more than one mono source at a time. Either that, or all of the sound buffers would have been grouped under the same voice schedule and worked despite the bug.

The reason the bug persisted (it actually manifested itself differently - it crashed my rewrite) is because there is virtually no documentation for how the code in the Paris Studio Control Library works. So, I've read the original ASIO driver and the code in the PSCL to try to understand the API. Bugs in the code are really tough because I then have to guess at how it is supposed to work.

It's fixed.

I'm getting an access violation when the buffer switch occurs, but that's my bug, and it's now making it pretty far into the process now.

I realized that I have to make some changes to my approach, too. The EDS1000 cards can only manage 24 streams of audio at once. In the PARIS app, that's okay because a track is either playing back or recording, never both at once. In an ASIO driver, the inputs and outputs exist separately. So, I'm going to have to put an option in the control panel for how to divide up the ins and outs, ie. 12 ins and 12 outs (which is what the original driver did) or 22 ins and 2 outs, or whatever.

That's where I'm at.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Sat, 10 May 2014 15:41:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

Mike,

This is great news, if you can finish this soon I'll be back in PARIS full time. I'm doing everything I can right now not to buy one of the newer interfaces like the ID22 or Crimson.

If you need testing let me know. I use Live 9, Studio One V2.6 for production and Reaper 4 for Nebula.

Subject: Re: ASIO DRIVER current status ?
Posted by [excelav](#) on Sun, 11 May 2014 18:15:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Mike, on that I/O thing could you create an option templet so the user could select either 12 ins and 12 outs or 22 ins and 2 outs? Or is it written in the code one way or the other? I could see both being useful.

James

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 11 May 2014 18:19:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

I've actually been thinking more about this. I'm pretty sure I saw a "hints" option in one of the ASIO specs. I'll have to re-read it (one of the problems of having to stop and start on this so often). If the app will tell the driver that a channel is starting to record, I can switch which stream is active.

If I can't do this, there will be an option in the control panel to divide up the streams however you want.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [excelav](#) on Mon, 12 May 2014 16:14:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

That would be very cool Mike, thanks!

James

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Thu, 22 May 2014 23:23:28 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm, right now, listening to Ian North's "Beautiful City" using the PARIS Hardware, Reaper, and the re-written ASIO driver.

It's passing 24 bit audio.

There's lots of work to do, but the new core finally works.

Cheers!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Thu, 22 May 2014 23:24:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

Woot! Got her down under 256?

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Fri, 23 May 2014 00:29:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

Yes!!!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 23 May 2014 00:40:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

I had it working at 180. I turned it up because with the debug messages I'm printing for testing, I needed a bit more leeway. But, it worked.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 23 May 2014 00:46:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

The best part of this is that the new version has the hardware initialization completely separated from the ASIO part. So, the MEC initializes once when reaper start up, rather than the hardware

closing and re-initializing every time a setting changes. Just accessing the preferences panel in Reaper used to take a full minute. Then, it would be a full minute after it closed while the MEC cards were detected and initialized. Now, it's instantaneous.

It's going to be a million times easier to fix bugs add features now, too. It's just so tidy.

I'm totally exited about this!

Subject: Re: ASIO DRIVER current status ?
Posted by [laurent](#) on Fri, 23 May 2014 08:42:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

yes yes yes !!!!

Subject: Re: ASIO DRIVER current status ?
Posted by [Dimitrios](#) on Fri, 23 May 2014 09:53:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

Great news !!!
It has been some ggod time not working with Paris but I would be very excited working Cubase with Paris hardware...
Thanks for still working with Paris !
Regards,
Dimitrios

Subject: Re: ASIO DRIVER current status ?
Posted by [mani1147](#) on Fri, 23 May 2014 13:06:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

Aw yes....Pro tools on a MEC, now that would be a trip and a half, St.Croix would be proud, or pissed, not sure.

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Fri, 23 May 2014 13:51:50 GMT
[View Forum Message](#) <> [Reply to Message](#)

Both, but in the end he would just be proud to see his baby still allowing people to pursue their creative passion in 2014.

Now me, I look forward to the day I can use PARIS hardware in PT and all the other DAWs....

"DAW Wars II - PARIS Strikes Back"

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 23 May 2014 15:46:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

I just found some new (to me) thread priority functions that were introduced in VISTA.

Even my debug build is now doing 180 samples. Even doing a control-alt-delete and starting the task manager just made a couple of small clicks and then the stream recovered.

Too cool!

File Attachments

1) [beautiful-city.jpg](#), downloaded 10165 times



Subject: Re: ASIO DRIVER current status ?
Posted by [portscan](#) on Tue, 03 Jun 2014 13:28:55 GMT
[View Forum Message](#) <> [Reply to Message](#)

sweet
any idea of when you'll have a usable version ?
will we be able to use the expansion cards too ? adat 8in 8out...
am thinking of either waiting for your final driver, or purchase a computer only to re use the 32 bits version and paris 3.0.
would love to have all the hardware on 1 pc only.
thanks !

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 03 Jun 2014 18:11:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

I just got audio passing through my 8 out card from the ASIO driver for the first time. Too cool!

As for timelines, I have no idea. I get closer every time I work on it, but time is tight. I'll do my best to get it out as soon as possible.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Sun, 06 Jul 2014 15:35:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi @ all,

did rebuild my studio and it is ready now .
Still works the asio driver now ?
Where can i buy it ?

I like to run Paris Hardware under Cubase 4 & 5 on one system.
It is very interisting, cause a college use Cubase and a good old Paris too.

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 07 Jul 2014 14:02:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

I've been working really hard on this.

I just tracked down a bug that must have existed in the original version. It involves the deleting of sound buffers before the EDS cards are done with them. I'm going to have to do some re-factoring to fix it. I've been banging my head against the wall for most off the last week trying to track it down.

This is where I am with the project:

What's done:

I've refactored the driver so that one can assign I/O channels to up to 24 audio streams per card(that's all an EDS1000 card supports). The streams can be either inputs or outputs. The selections are currently loaded from the registry.

I've got the driver able to select any MEC expansion card for each of the two in and out banks per MEC. The selections are loaded from the registry. Just to be clear, 8 in cards, 8 out cards, and ADAT cards are all supported.

The driver loads the buffer size and sample depth from the registry.

The driver plays back and records 24 bits.

The driver can be closed and opened by the host app without resetting the hardware (resetting just took too long).

What's left to do:

Fix the buffer bug I just found.

Finish the control panel so that the settings that are currently loaded from the registry can also be accessed from via a user interface.

Deal with a few more items relating to the C16. I haven't assigned some of the knobs to MIDI notes yet.

We're getting closer. I'll get it done as fast I can while still making sure it's done well.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [excelav](#) on Mon, 07 Jul 2014 15:25:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Mike!

I just want to make sure I understand what you said above. Can you access more than 2 I/O cards in a MEC at a time? With the ASIO driver would you be able to have 24 input via 3 of the 8 input cards at 24bit with one EDS card and one MEC? Or 24 input via 3 adat cards with one EDS 1000 card and one MEC? If not now, would it be possible in a multi MEC/EDS system in the future?

Thanks
James

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 07 Jul 2014 15:38:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi James,

unfortunately, there are a fixed number of physical lines (I2S) that connect the IO modules to the EDS card. You can have two input banks and two output banks plus the I/O built into the MEC.

Sorry!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [excelav](#) on Mon, 07 Jul 2014 15:52:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Mike,

That's okay, that's the way it has always been. I was just wondering if the ASIO driver could change that.

Thanks
James

Subject: Re: ASIO DRIVER current status ?
Posted by [anfallszonen](#) on Mon, 01 Sep 2014 21:58:41 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello Mike!
I am very curious ! Do you have any news to share?

Best Regards

Lasse

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 01 Sep 2014 23:42:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Lasse,

I have the GUI to finish, which I will be able to work on next week when my daughter starts kindergarten. There is a bug on a beta tester's system to track down that I haven't personally been able to reproduce yet. It's almost done.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [anfallszonen](#) on Tue, 02 Sep 2014 19:18:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks Mike!
Looking forward to the release party!
Best Regards

Lasse

Subject: Re: ASIO DRIVER current status ?
Posted by [Dcbite](#) on Wed, 03 Sep 2014 09:05:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Very much looking forward to this Many thanks Mike .

Subject: Re: ASIO DRIVER current status ?
Posted by [Richard Kelley](#) on Wed, 03 Sep 2014 16:06:28 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike, All I have to say is you have an unbelievable amount of patients to deal with all of us knucklehead Paris users, and dealing with raising little bambinos,[I think its' plural] Upon reading the postings on the site, like me, there are users from all different levels of studio people. I do get confused myself with some of the questions and answers on the site. I am a personal type of studio where most of the software and hardware does pretty much everything I want, or know how to do. I have been using my new rig now for quite a few months now, and lately I have been doing 12 to 16 hours a day working in my studio and KNOCK on wood, I have not had one Paris issue with the new driver on windows 8 32 bit, the only problems were \$^%&&* & user mistakes thank God I still have my 3.0 manual. Waiting to see what comes next. As far as I am concerned I say take your time, and make sure to save time to see the little ones growing up, times you can never

get back, Paris will be here, I thank you for your work, because I personally would not have such a great rig as I do if it wasn't for the work that the skunks and all the earlier paris dogs, and especially for the leader of the pack,[va- room va-room] Mike A Thanks, Rich K.

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Wed, 08 Oct 2014 00:26:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike,

any new update or news to share on how everything is going with the ASIO Driver???

Can't wait!!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 08 Oct 2014 00:45:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Studio 11,

A lot has been happening, but never as much as I wish was happening.

I've been working with a couple of beta testers who have been very generous with their time in helping me track down bugs. Together, we have found and fixed a bunch of them.

I also had a breakthrough last week and re-wrote a major section of how the driver works. The original ASIO driver would schedule what's called a voice event at every buffer switch. This scheduling takes time and had a bad habit of falling behind. I found a way to schedule three voice events at the start of playback, and two of them just point to each other in a loop. This has improved the performance and reliability of the driver immensely.

So far, we've got the ASIO driver working in Reaper, Adobe Audition 3, the ASIO plugin for Windows Media Player, Sony Sound Forge and Sony ACID Pro 7.

I bought a copy of Harrison Mixbus last week trying to figure out why it doesn't work in that app yet. I'm still working on a fix.

I've also ordered a copy of Pro Tools 10/11 because I have reports that the driver doesn't currently work in Pro Tools 10. It hurts a little playing Avid and Pace money again, but it's for the greater good. The driver will not initially work with 64 bit hosts, so Pro Tools 11 will be a future target, after I re-write the PSCL and integrate it into kernel mode. That's a few years away. But, I'm planning to fix whatever is keeping the driver from working with Pro Tools 10.

I've done some work on the control panel, but most of the effort has been directed to fixing bugs and improving performance/compatibility.

I have a couple of other PARIS things that I'm planning on that I'm not ready to talk about yet in case they don't work out. Rest assured, though, that things are happening.

Thanks so much for being patient. It really is harder getting things done with a growing family. I'm also taking a linear algebra course right now hoping to get my math skills up to better understand the effects algorithms. It's been much more time consuming than I expected, but I'm learning a lot.

There's a lot going on!

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Wed, 08 Oct 2014 00:52:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

thanks so much for the detailed update!!

Looking forward to many more years of using Paris

Don

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 08 Oct 2014 01:09:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

Me, too!

Subject: Re: ASIO DRIVER current status ?
Posted by [laurent](#) on Wed, 08 Oct 2014 22:09:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

hallo super mike
don t forget to sleep

laurent

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sat, 11 Oct 2014 14:40:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Laurent,

I did, actually, stay up last night working on the driver. The coffee is extra good this morning!

Currently, the PARIS ASIO driver works with Pro Tool 10.3 in 16 bit mode, but not 24 bit mode. I have an idea of how to change things that might make it work in 24 bit mode, too. It all depends on how the firmware in the EDS cards works, and I have no control over that, unfortunately.

I'll post in a few days after I can make changes as to whether it worked.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [laurent](#) on Sat, 11 Oct 2014 14:54:22 GMT
[View Forum Message](#) <> [Reply to Message](#)

yes super mike coffee driver

you are the paris driver
you are in all eds 1000 cards

thank s
laurent

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Thu, 23 Oct 2014 02:14:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi All,

I just played and recorded 24 bit audio in Pro Tools 10.3.9 through my MEC.

I had to redesign/rewrite the way buffers are handled in the driver to do it, but its working here. Hopefully, there will be no weird system dependent bugs to track down.

I can hardly believe it.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Thu, 23 Oct 2014 02:19:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

Now this is VERY good news!!!

Subject: Re: ASIO DRIVER current status ?
Posted by [Kim W.](#) on Sun, 26 Oct 2014 07:15:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

Nice work, Mike.

This sounds very promising, even though I'd be happy with just 16 bit.

I still love the Paris software, but it is very picky with some plugins, which can crash Paris. I am using WIN7 64bit, but these issues existed with XP 32bit as well.

Looking forward to trying the ASIO driver with my next favourite DAW, Samplitude. (Native inserts on submixes would be joyous!!)

I'd stick with the Paris software if I could even do something as simple as strapping an external compressor, or even better a native plugin, on one EDS submix, (not just the global mix..)but alas this is a hard wired limitation.

Keep us posted.

Kim

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 26 Oct 2014 13:25:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Kim,

I'm working really, really hard on this driver. Pro Tools is giving me the gears. I have it working, but there are stability issues when changing buffer sizes. It's driving me crazy trying to track the cause down. It works perfectly everywhere else, except for Harris Mixbus, which is a whole other adventure to be had.

But, I'll get it. I won't give up until this bug is dead.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 28 Oct 2014 14:46:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi All,

I just wanted to give an update. Getting the PARIS hardware to work with Pro Tools 10 reliably has been really challenging, and I'm still working on it.

I had to re-write the buffering engine to work at all because even though the ASIO spec has a mechanism for asking the driver what its buffer sizes are, Pro Tools only allows 64/128/256/512 etc. The PARIS hardware requires buffer sizes that are a multiple of 10 for 24 bit transfers. So, I had to change things quite a bit to get it working.

The next two hurdles were because of bugs I created. Those bugs are my fault, but Pro Tools closes as soon as it detects a debugger attaching to its process. This is probably done to make it harder to crack the PACE copy protection. In my case, it just makes it harder for me to fix things.

I had a bug that didn't manifest in other hosts because they always initialized the buffers in the order the driver presented them to the app. Pro Tools changes the order, and that revealed a mistake I had made. It lead to not being able to record audio in Pro Tools. It's fixed.

The second bug I've been trying to track down is a crash that sometimes happens when the buffer size is changed. It seems to happen more when the buffers are at 128 samples, but I've seen it at higher buffer sizes, too. Because I can't use a debugger and the problem hasn't manifested in other apps, this has been really, really hard to track down. I've literally spent days and days coming up with new theories and trying to prove or disprove them. I think I've finally found the problem, and I hope to have it fixed in about a week.

As long as the buffer sizes are not changed, Pro Tools works perfectly right now. So, we're not too far away.

I'll post when I finally have this resolved.

I just wanted to let you guys know what is happening, and that I'm still working really hard on this.

I have to give an extra special thanks to the beta testers who have helped us get to this point. You guys rock!

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Dcbite](#) on Tue, 28 Oct 2014 15:55:40 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thanks for the update Mike , greatly appreciated . Can't wait

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sat, 15 Nov 2014 13:17:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Guys,

Another update:

The good:

I've replaced the timer code and I'm getting 64 sample buffer sizes in Reaper with 12 inputs and 10 outputs working reliably. I am so excited bout that!

Also,I found out why I couldn't get as small buffer sizes in Pro Tools, and I've fixed it. I'm now getting 128 samples buffer size reliably in Pro Tools 10. 64 seems to be too small for that app. I still have to do a bit of testing to see if MIDI timing in Pro Tools is affected by what I've done, but I think it will be fine.

To do:

For some reason at the newer smaller buffer sizes I can now get, playback is garbled for the first playback. If I reset the driver, it's perfect from then on. I'm not sure if the sample position that is reported by the hardware is inaccurate when the MEC is still finishing its initialization, or if something in the PSCL is creating a race condition, or something else I haven't thought of. I'm working on it.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Sun, 16 Nov 2014 13:57:51 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike, don't stress too much with PT buffer lower than 128, even my PTHD hardware would not get below 128 without issues.

Sounds like you are making great progress, can't wait to try it out.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 17 Nov 2014 16:54:08 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks, Will!

I think I found the bug I've been chasing. I discovered last night that the top 8 bits of project time are filled in by a helper thread in the PSCL, while the other 24 bits are read directly off the card. I think what has been happening is that I schedule the buffers before this thread is running, so I'm setting some things based on 24 good bits and 8 bits of garbage. If I stop the ASIO driver, the PSCL keeps running, so the helper thread is already running on the second attempt, and this second try always works.

I'm going to have to rewrite a bunch of stuff in the PSCL, but I should have this fixed by the weekend.

The Pro Tools problem was caused by something called dynamic priority boost in Windows. It boosts a thread's priority if it was waiting on an I/O operation or is involved in mouse input to the main window. This was causing mundane threads to preempt my timing loop and causing under-runs. I turned it off, and things worked so much better. I'm pretty sure reaper turns this off itself, which is why everything worked so well under reaper before.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Mon, 17 Nov 2014 17:15:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike,

Things just keep getting better and better because of all your hard work!

Don

Subject: Re: ASIO DRIVER current status ?
Posted by [mani1147](#) on Mon, 17 Nov 2014 18:34:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is Epic new Mike. I have a rack full of dormant Paris hardware sitting in my rack as I have switch to PT10 with Focusrite hardware. EDS / MEC hardware with PT would be so cool.

Keep up the awesome work and keep us posted on your progress.

Rob

Subject: Re: ASIO DRIVER current status ?
Posted by [casshern](#) on Sun, 23 Nov 2014 04:27:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Has this been tested with FL Studio? How good is the implementation in Reaper?
Does this also work for output cards / external effects processing from within PARIS?
Any chance for a beta / preview? Interested even if I have to pay up...

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Sun, 23 Nov 2014 04:40:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

Don't know about FLStudio; the implementation of the ASIO driver should be excellent in Reaper since that was a big testing platform.

The completely separate Reaper PAF import functionality mentioned above, written for us by a Reaper contributor, is pretty much flawless within its limitations - because it depends on libsndfile, our main library for PAF's compatibility with the outside world, it's hampered by a lingering bug in libsndfile that makes gibberish out of 24-bit files generated by the Mac version of PARIS only, but all PC-PARIS generated PAFS should import as easily as you'd import a wav.

Strongly doubt there will be any ability to access PARIS effects, but it may be possible one day! Fully accessing I/O cards though, I would imagine yes, since that's always been a core goal.

As far as paying up - this is all entirely new work by Mike, and even if every existing PARIS user chucked in a far bigger chunk than what I suspect he'll ask it would pay him pennies per hour for this labour of love, so I will be first in line with my cash in hand asking why I can't pay more!

Subject: Re: ASIO DRIVER current status ?
Posted by [casshern](#) on Sun, 23 Nov 2014 04:54:14 GMT
[View Forum Message](#) <> [Reply to Message](#)

Well, I'm even more excited
I use the Reaper PAF extension all the time these days, as PARIS is my core A/D source.
Recording nearly daily. I just love the functionality and sound. ASIO drivers bring amazing news to the table for people like myself.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 23 Nov 2014 12:53:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Guys,

I'm so excited about this, too!

I've been working as hard as I can on this. I was hoping to avoid making too many changes to the PSCL because it then has to be tested to make sure it didn't break the PARIS app, but I'm going to have to make a bunch of changes. The kind of locking the PSCL uses to guard shared resources are too slow for the kind of buffer sizes I'm targeting. So, they have to be replaced. I'm also working on a new way to read project time and start and stop playback.

A big thing I'm working on now is getting the voice events that point at themselves to be reliable. The problem is that there is no way to tell them when to start playing/recording. They start the instant the EDS card is told about them. I may have to go back to scheduling voice events on the fly, but that 's a bit messy now that Pro Tools has required a circular buffer that doesn't line up with the buffer switches. It also adds more overhead to the buffer switches, which could affect how low we can get the buffer sizes.

We're getting there. It's just been harder than I thought it would be.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Sun, 23 Nov 2014 14:10:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike, If it was easy ID would have done it 13 years ago, lol.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 23 Nov 2014 14:29:16 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Will,

I actually don't want to criticize ID over this. There is a lot of good stuff in their work that I'm learning from. I don't think Ensoniq really had the money they needed to get this done right. We can certainly criticize ID over how they have handled the PACE thing, though.

I think just had a breakthrough - maybe there is a way to get these immediate buffers time aligned. I just loaded up a pro tools session at 128 samples, and it played back properly the first time, twice in a row. I'll have to do a bunch more tests to make sure all is well, but it's worked

twice, and those are the only times it's ever worked.

I still have to fix the locking, and I have to make changes to the helper thread in the PSCL. It runs every 256 samples and does a bunch of housekeeping. But it touches resources my timer thread needs, and there is no time for contention at 64 sample buffer sizes. I'll need to make changes so that a special version runs when the ASIO thread attaches,

This is going to be so cool!

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 23 Nov 2014 16:11:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

Just an update: there is lots of testing yet to do, but after the last change, I've got Pro Tools running at 64 samples, 27 tracks playing, and no under-runs.

Sweeeet!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Sun, 23 Nov 2014 17:29:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Who would have thought this would be possible in 2014, so many years after Paris had been discontinued. This is going to be fun!

Unbelievable work by Mike.

Thank you Mike!!

Don

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Mon, 24 Nov 2014 03:46:47 GMT
[View Forum Message](#) <> [Reply to Message](#)

Whoa Mike, 64 samples rocks! You sound like you are in a zone up there!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 25 Nov 2014 19:20:25 GMT
[View Forum Message](#) <> [Reply to Message](#)

Now the not so good news: Now that we can test at 64 sample buffers, there is a bug in the firmware on the EDS cards where they misreport the project time every so often.

There is code to detect this kind of thing in the PSCL. I was hoping it was a leftover from an earlier firmware or simply covering for other mistakes in the PSCL. Keep in mind, the PSCL is huge, and the whole thing is built around the assumption that the time is checked every 256 samples. This was the first time I tried to bypass the code there to check the project time directly.

This issue was easier to deal with in the PARIS app, when the sample event fired every 256 samples (an IRQ fires every 256 samples), and the buffers were 3000 samples long. If the project time reported by the EDS card looked crazy, just report 256 samples more than the last time. It will be close enough. That isn't good enough at 64 sample buffer sizes.

I'm going to have to do a bunch of profiling to see exactly how this goes wrong and for how long. Then, I can interpolate by using the windows high resolution timer.

What a mess.

Just keeping everyone in the loop.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Tue, 25 Nov 2014 20:54:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike, you are the man! Seriously, who else would even be attempting this, lol. Thanks for the update.

Subject: Re: ASIO DRIVER current status ?

Posted by [laurent](#) on Tue, 25 Nov 2014 22:58:46 GMT

[View Forum Message](#) <> [Reply to Message](#)

reflashe the firmware eds cards ???

eds transfert = --,-- ??

le pere noel est bientot la

super mike

laurent

Subject: Re: ASIO DRIVER current status ?

Posted by [justcosmic](#) on Tue, 25 Nov 2014 23:01:11 GMT

[View Forum Message](#) <> [Reply to Message](#)

Brilliant work Mike.

That firmware issue seems a really annoying one to have to deal with...hope you manage to find an elegant solution.

Anyway, like everyone else reading this thread - very excited about the new developments - way to go!

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Tue, 25 Nov 2014 23:53:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Just an update: I have a new build, and I've been running Pro Tools for an hour with no issues. I'm reading the first 24 bits of project time off the cards and interpolating the top 8 bits.

So far so good.

I'll keep you guys posted.

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [justcosmic](#) on Wed, 26 Nov 2014 01:12:59 GMT

[View Forum Message](#) <> [Reply to Message](#)

So does that mean you've found a work around for the Firmware issue?

Also, small question re your planned implementation of Control 16 in the Asio driver:
Will it likely work with more than one C16 for those with multiple EDS cards or is it more likely that it will only work with one at a time?
Reason I ask is that I may sell off one.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 26 Nov 2014 01:41:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi justcosmic1,

I sure hope so I've got it solved. I don't have access to the microcode on the card, so I have to do a lot of guessing. It's possible that it was something else causing the glitches. I really hope I didn't malign whoever wrote that code or mislead you guys. But, the glitches seem to have aligned with when the top 8 bits changed, and there is all kinds of stuff in the PSCL that seems to imply others thought this was happening. I hope I got it right and its fixed. I've been running my 27 track Pro Tools session for the better part of tonight at 64 samples, and it's been solid. I'm not doing anything to interpolate the first 24 bits yet. I'm just reading them. I'm adding one to a counter that acts as the top 8 bits every time the first 24 bits end up significantly smaller than the last check, which means they have wrapped. That happens every 5 or 6 minutes. This works because it is very unlikely we will have no buffer switch for 6 minutes. So far, so good.

As for the c16s, that's a great question! I don't think I had been planning to support more than one, but I just took a look, and the PSCL does send the card number with the callback. So, I'll try to use that to support more than one. I have a few around here to test with, too. I just only use one to save desk space.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [justcosmic](#) on Wed, 26 Nov 2014 01:53:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

Oh that sounds really encouraging news!
Yes let's hope - it could be a great Christmas for Paris users !

Yes like you I nearly never get more than 1 C16 out for the exact same reason - so maybe I'll let one go anyway, we'll see - but good to know that there's potential for 32 faders anyway!

Thanks again for all the hard work.

Subject: Re: ASIO DRIVER current status ?
Posted by [Kim W.](#) on Sat, 29 Nov 2014 08:12:03 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike.

Please excuse my ignorance.

Are you suggesting that your asio driver would somehow incorporate c-16 functionality into a completely different DAW app?

If so, how? Would the Paris app have to be open in the background?

I'm excited about the prospect of using the c-16 (preferably two) with Magix Samplitude, which is my other DAW of choice.

Am I dreaming??

Regardless, I will be first on the purchase list of the driver when it hits "prime time".

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 01 Dec 2014 19:53:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Kim,

The new driver takes the C16 input and converts it to MIDI sent out any port you select. There's no need to have the PARIS app open in the background. I've used it to control Reaper, but I haven't tried it yet with anything else. Getting the core of the driver right while working with Pro Tools at 24 bit has been a struggle. I think I've got it working. Right now, I'm working on dealing with what happens when the 32 bit value that is the basis for project time rolls over to 0 again. It takes around 16 hours, but it happens, and the audio stops. I'm trying to fix it.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Wayne](#) on Mon, 01 Dec 2014 21:36:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike, so very cool.

I'm adding a new topic on Virtual Via and I'd like to get your take on it.

Wayne

Subject: Re: ASIO DRIVER current status ?
Posted by [portscan](#) on Wed, 10 Dec 2014 15:10:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

hi
any chance to sse a wdm 64 bits version ?
would be great to use with asio4all then
i dream of having both my raydat and paris in the same daw.

Subject: Re: ASIO DRIVER current status ?
Posted by [casshern](#) on Thu, 28 May 2015 20:43:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

Any updates on this?

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Fri, 29 May 2015 19:16:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike has been fine tuning the driver and I'm confident he'll be releasing it soon.

Subject: Re: ASIO DRIVER current status ?
Posted by [justcosmic](#) on Thu, 04 Jun 2015 00:32:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm curious Mike - are we looking at a cut down release to start with just basically allowing access to the i/o control 16 etc, or are we looking at access to the FX and mixing functionality in the first release ?

I seem to remember a while back you were talking about doing it in stages as it's a HUUUUGE undertaking

Either way, very much looking forward to continuing on with all that makes Paris great...also quite curious about Paris 3.2...

All in all, exciting times ahead in Paris world

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Thu, 04 Jun 2015 00:40:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

I don't want to speak for Mike but, I/O access to start is what I believe he has in mind.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Thu, 04 Jun 2015 10:00:16 GMT
[View Forum Message](#) <> [Reply to Message](#)

The version I'm working on is about I/O options, low buffer sizes, and 24 bit. What happens next depends on whether I can get PARIS 3.2 to work.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [justcosmic](#) on Thu, 04 Jun 2015 11:35:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks for the clarification Mike.

Subject: Re: ASIO DRIVER current status ?
Posted by [Dimitrios](#) on Thu, 04 Jun 2015 16:55:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

Great news Mike !!! I trying to build a modern PC with windows 7 so I am looking forward to all asio and driver.

You said (wrote) something about Paris 3.2 ?????? What is that supposed to be ?

I am still using Paris on XP so if you need any beta tester let me know.

Thanks again my friend for all your efforts!

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Thu, 03 Mar 2016 22:04:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

It's been slow around here so I want to say Mike's latest ASIO is working very well in every DAW, I could see a 2016 release coming soon.

I'm sure the PARIS world is waiting for this baby!

So Mike..... what's your plan?

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Thu, 03 Mar 2016 23:05:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Will,

I was getting a fair bit of time in, and then we all got a cold, and I've had two sick kids at home to look after.

I've got the MEC control panel done. I just have to test the +/-10 controls. It's hard to check that from remote desktop on a laptop in the car with PARIS running in the house.

Last week, I discovered a bug that I thought was squashed wasn't. After finishing the MEC control panel, I started testing all sorts of settings, and With 24 streams of audio, I'm getting occasional audio distortion at 64 samples. By streams I mean 24 I/O ports in use transferring audio on my MEC and 442. I took a look through the voice engine code, and I think I've figured out why.

The core of the voice engine that runs on the EDS card is something called the "big loop." It runs every 64 samples. It does all the memory transfers, and then it checks for new streams to add.

I think the work involved in setting up the 24 streams is delaying the loop by a few samples, and it just carries on at that point, every 64 samples, but slightly late. That puts it slightly out of sync with the main loop in the asio driver.

That's my theory, anyway.

So, I've been working on it. I've almost finished a function to change the frequency of the IRQ firing on the cards. Since the big loop fires the IRQ every 4th loop through the big loop, the IRQ is always in sync with the big loop. I think I've figured out how to make it fire every 64 samples instead of every 256. I can then run the ASIO loop from that.

Other than that, I've just got to do a simple dialog for the 442, and make a couple of additions to the C16 code. There are a couple of knobs I haven't wired in, but it's pretty simple stuff.

That's the latest! I'll get it out the second it's done and working perfectly.

I'm starting to think ahead to the next steps. I'm thinking of attacking the PSCL to port it to 64 bits so we can get a 64 bit ASIO. I'm also thinking about the Mac a lot, given the state of Windows. Reworking the PSCL would make it easier to port it to a new OS.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Thu, 03 Mar 2016 23:32:04 GMT

[View Forum Message](#) <> [Reply to Message](#)

Awesome Work...as always!

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Thu, 03 Mar 2016 23:40:58 GMT

[View Forum Message](#) <> [Reply to Message](#)

Sorry for putting you on the spot Mike, lol.

Your updates are inspiring to many of us and your work is one of the reasons I'm rebuilding my PARIS rig, on it's own computer.... I'm searching for parts, planning a PARIS re-evolution in my setup.

Subject: Re: ASIO DRIVER current status ?

Posted by [dnafe](#) on Fri, 04 Mar 2016 10:14:22 GMT

[View Forum Message](#) <> [Reply to Message](#)

I have the greatest respect and admiration for you and the work you have done for Paris Mike

Not too many people would take on such an endeavor

You are the man!

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Fri, 04 Mar 2016 13:39:19 GMT

[View Forum Message](#) <> [Reply to Message](#)

I agree, people talk about saving the planet all the time. Your actions have directly lead to the planet being less polluted, as many PARIS users did not trash their systems when ID or CL stopped support a decade ago. In a small way Mike, respectfully, you are an actual hero.

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Fri, 04 Mar 2016 20:06:06 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Will,

I'm glad that I've made a contribution, but I'm definitely not an environmental hero, as much as I would like to be.

I've been working on the ASIO driver for the last six months from my 2008 Dodge Caravan while

my son has his naps. I have to idle the engine the whole time, partly to keep from freezing (this is Canadian winter) but mostly because if I turn off the car, my son wakes up. The car is the only way I can get him to sleep.

I am completely sick of buying things only to throw them out. But to some degree, I keep doing it. To throw out PARIS hardware takes things too far. Keep in mind that I was burnt by Digidesign on the Session 8, and it wasn't going to happen twice if I could help it.

I bought an Energy Star home, but rather than being an environmental triumph, it left me with no respect at all for the Energy Star program. You should feel the draft that comes through my 2013 Energy Star windows. Natural Resources Canada wouldn't even come out to check them, much less do anything about it.

I have a compost bin, but I don't use it in the winter because it's too cold out. I go outside as little as possible in the winter. I do recycle as much as I can.

I would love to be an environmental hero, and I hope that with the PARIS work, I've helped make up a little for the rest of my life!

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [dnafe](#) on Sat, 05 Mar 2016 11:18:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

Slightly off topic

Have you tried playing white noise to help your son sleep?

Subject: Re: ASIO DRIVER current status ?
Posted by [Kim W.](#) on Sat, 05 Mar 2016 12:54:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hehe. I have problems sleeping in total silence. I have a certain amount of tinnitus due to playing in LOUD bands many years ago. I still gig, but ALWAYS block my ears with rolled up toilet paper. (Readily available at gigs!).

To sleep, I need white noise. In summer I use a pedestal fan, and in winter I use an FM radio tuned off station.

I cannot sleep without some sort of constant wideband noise. It also helps mask external noises in the middle of the night, which wake me up. (My dogs snoring, possums running on the roof, cocks with loud exhausts etc....)

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 06 Mar 2016 16:44:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

We have a white noise maker that we bought for Isabelle. I'll see if I can use that and turn off the engine once it is warmer out.

I've been working on the ASIO a lot. I've got the main timing loop synchronized with the "big loop" in the EDS firmware. I have to rethink how I handle resynch requests because of missed samples now. I can't just pick any sample position and go anymore. It's tricky because I had to use a larger, circular buffer for the EDS side that is a multiple of ten and two regular buffers for the ASIO side that are powers of two so that Pro Tools could do 24 bit. If Avid could follow the ASIO standard, this would have been done a year ago.

I'll keep you guys posted. This kind of bug is hard because I'm at a play place with my daughter working on the driver from a lap top using remote desktop. I can't hear the output to see if I've fixed anything.

But, I'll check it tonight.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 30 Mar 2016 22:21:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

I think the ASIO just transitioned from Alpha to Beta status.

I just finished the 442 control panel, which, unless I'm forgetting something, makes the driver now feature complete.

I have a bunch of testing to do for the MEC and 442 control panels (because I can't test everything in the car), and I think I can get the ASIO buffer switches timed from the EDS1000 IRQ, which will reduce CPU overhead at lower buffer sizes.

We're very close.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [Richard Kelley](#) on Wed, 30 Mar 2016 23:23:28 GMT

[View Forum Message](#) <> [Reply to Message](#)

Alright that sounds Great to me ! Except I have to admit I am not really sure exactly what that all means. I just appreciate everything done to keep Paris alive and improving. I haven't been recording much lately, I have been doing quite a bit of playing out, but when this new driver is ready to go I will try it. When the driver is ready to try, I would be willing to test drive it a bit, as long as my brain will now how to revert if things to scary. Keep up the GREAT work and keep me in touch, Rich P.S. this is a pix of my new puppy Caesar, I lost my Buddy Samson March 1st.

File Attachments

1) [C tongue.JPG](#), downloaded 4671 times



Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Wed, 30 Mar 2016 23:40:40 GMT
[View Forum Message](#) <> [Reply to Message](#)

Wow...you are incredible to keep this great platform going!!!

Thanks!

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Thu, 31 Mar 2016 01:23:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

We need a Mike Audit Day celebration!

Subject: Re: ASIO DRIVER current status ?
Posted by [harry epstein](#) on Thu, 31 Mar 2016 04:41:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

a Mike audit day, indeed! what would we all do without mike? thanks so much, mike, for all you do, and for your continuing love and passion for the incomparable paris system. we all owe you a very large debt of gratitude.

Subject: Re: ASIO DRIVER current status ?
Posted by [imajon](#) on Sun, 03 Apr 2016 22:07:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

Haven't checked in on Asio Drivers for a while. I see there is movement and am exited about that. Much thanks to you Mike for all your work keeping the Paris sound alive and relevant today. I would be happy to be a beta tester!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 25 Apr 2016 15:35:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Guys,

I have a question and an update.

My question: does anyone know how accurate the Centrance ASIO latency utility is? I just ran it on the PARIS ASIO driver, and it reported 1.45 ms round trip latency. Is this in addition to the 1.45 ms (times two) from the buffers? I've included a screen shot. I hope this is true!

My update: I'm working on OSC support for the C16. I've made further improvements on efficiency since getting the main timing loop driven by the IRQ on the EDS card. I'm down to 3.5% CPU usage with dozens of tracks at 64 sample buffers.

OSC is going to be harder than MIDI because I have to manually map every single control. But, I'm on it. I'm targeting Reaper.

I've also got the ASIO driver loading as Windows MIDI driver to pass data for the C16. I'm not sure if it will just pass simple MIDI control messages or something more. I'm leaning towards some kind of partial HUI compatibility so it can be used in Pro Tools 10.

All the best!

Mike

File Attachments

1) [PARIS-ASIO-Latency.jpg](#), downloaded 7329 times



Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Mon, 25 Apr 2016 21:43:36 GMT

[View Forum Message](#) <> [Reply to Message](#)

Looking good Mike, I can't wait for the finished product, as always great work.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sat, 30 Apr 2016 00:21:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi All,

I just sent the first OSC messages from the C16!

The faders are working going from the c16 to Reaper. The next step is getting updates back from Reaper and turning on the up and down LEDs.

If anyone has any requests for how to map the many buttons and knobs on the C16 to Reaper, I could use the help. For example, what should I do with the Monitor Level knob? There is no equivalent in Reaper that I know of.

I'm trying to keep the C16 working in Reaper the same way it does in PARIS. For example, I'm working on having the Channel control knobs and buttons work the same way. I'm also coding to have the mute buttons become solo buttons when the solo button is pressed.

But, what do I do with the data, shuttle, and jog buttons? There are a whole bunch that I'm unsure of.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Sat, 30 Apr 2016 17:23:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

Oh man! How's OSC working for you, is it turning out to be useful?

The jog shuttle wheel would be awesome mapped to similar jog/scrub functionality in Reaper and there are assignable actions for it but it's pre-mapped to something called MultiRotate which I can't find any documentation on. Any idea what that is?

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sat, 30 Apr 2016 21:38:03 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Kerry,

It's working well. I've now got Reaper sending back messages and turning on the C16 arrow lights. I have a lot of work to do yet, but the basic building blocks are there.

I'm able to make very slight adjustments to the fader positions. The full 1024 values are definitely being sent.

The only down side is that it is a lot harder to work with than MIDI. I have to parse a bunch of strings in the callback. But, it's going to work.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [n0samples](#) on Mon, 02 May 2016 00:57:14 GMT
[View Forum Message](#) <> [Reply to Message](#)

So is this going to be working with reaper with paris in the background?

What's the timeline more or less?

It sounds great. Really great actually.

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Tue, 03 May 2016 01:14:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

Paris works with its own proprietary drivers but only the Paris app could use them. ASIO is a sort of "standard" driver that will allow most other audio software to use the PARIS hardware so there's no need to boot the Paris app (and in fact I'd be surprised if the Paris app can be run at the same time another app was using its previously dedicated hardware).

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Tue, 03 May 2016 01:36:20 GMT
[View Forum Message](#) <> [Reply to Message](#)

mikeaudet wrote on Sat, 30 April 2016 14:38Hi Kerry,

It's working well. I've now got Reaper sending back messages and turning on the C16 arrow lights. I have a lot of work to do yet, but the basic building blocks are there.

I'm able to make very slight adjustments to the fader positions. The full 1024 values are definitely being sent.

The only down side is that it is a lot harder to work with than MIDI. I have to parse a bunch of strings in the callback. But, it's going to work.

All the best!

Mike

There you go again Mike, working out another way to keep PARIS hardware out of the landfills.

Subject: Re: ASIO DRIVER current status ?
Posted by [n0samples](#) on Tue, 03 May 2016 04:35:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

Reaper running the Paris hardware sounds amazing.
Is it feasible to eventually have the DSP effects work in reaper?

Btw If we're taking request for c16 functions, a mono button and monitor Switcher would be really useful.

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Tue, 03 May 2016 20:24:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

Once the buttons output MIDI, retasking them via a script in Reaper should be trivial; Reaper has amazing scripting functionality so the things you're asking for should be pretty easy to execute, although there may be inevitable lag before someone writes the scripts for Reaper that will take advantage of the "extras".

Mike - how many of the buttons or knobs on a C16 will output usable MIDI values? Will the controller numbers be fixed or assignable? None of those would be a deal-breaker (MIDIpipe or the PC equivalent will be happy to do any necessary controller value translation), just curious.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 04 May 2016 15:53:55 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi N0Samples and Kerry,

N0Samples: I don't see a mono option in the default OSC document, unfortunately.

How exactly does the "monitor Switcher" work in reaper? I haven't seen it yet. I will have the record enable buttons mapped to the record buttons in Reaper.

Kerry: I'm not sure how I'm going to do the midi side yet. But, I'm going to send an OSC message for every button on the C16. It's my understanding that one can map these to commands in Reaper via the "learn actions" dialog. Reaper has the ability to map OSC messages to a subset of these options via a config file. I'm writing one of those files as I go.

A bunch of the buttons on the C16 don't seem to have a clearly corresponding option in Reaper. I could really use some help with this.

For example, if we could get a set of suggestions like "map the dim button on the C16 to the mono button on the master fader in Reaper," I can look into whether it's possible in the OSC config file options. Sadly, there is no "mono" option of any kind in the default OSC config file.

Here's a link to the reaper OSC info.

<http://www.cockos.com/reaper/sdk/osc/osc.php>

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sun, 12 Jun 2016 02:11:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Everyone,

I have a few updates and a Ardour/Mixbus question:

1) I just got Pro Tool 10 to start Playback with the C16 using HUI emulation. Too cool! There's lots to do, but it's coming along fast.

2) Ardour (and thus Mixbus) is undergoing a major re-write of its OSC subsystem. I've been working on supporting its new OSC subsystem, which will be part of Ardour 5 and Harrison MixBus 4.

But, it turns out that the way the new Ardour OSC subsystem is being implemented is not compatible with the OSC library I'm using for the ASIO driver. I'm not sure how much work will be involved in sorting this out.

Is anyone planning on using this driver with MixBus or Ardour?

3) The Reaper OSC stuff is 99% done. I think I just have to sort out the "Dim" button. I've got multiple C16 support working and two banks. If you have two C16s, they appear as a 32 channel

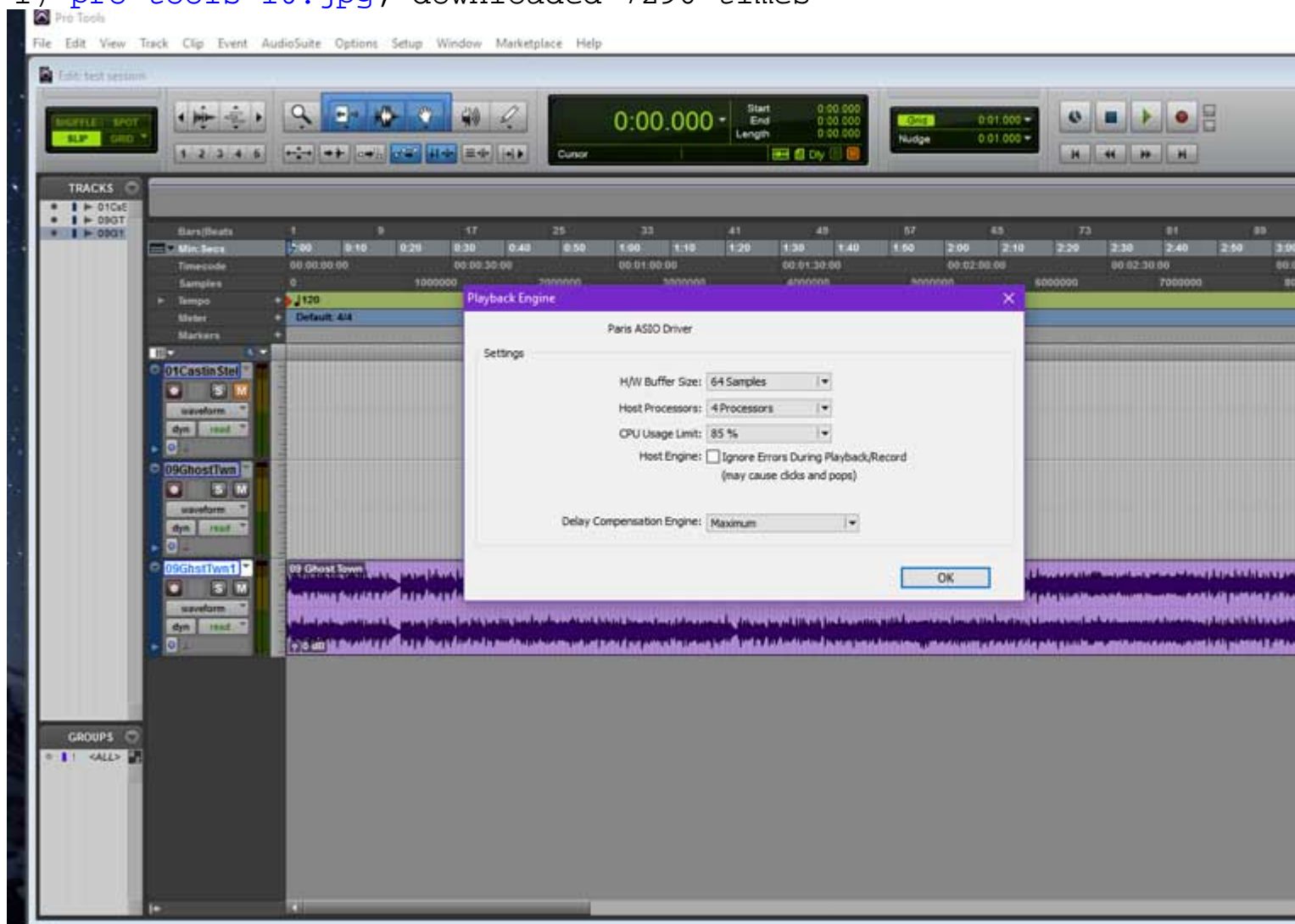
controller to reaper. Pressing the right arrow on the C16 moves them up to channels 33 - 64. The left arrow takes them back to 1-32. It should work this way with as many C16s as you have cards.

All the best!

Mike

File Attachments

1) [pro-tools-10.jpg](#), downloaded 7296 times



Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 12 Jun 2016 23:44:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

I just got the faders working in Pro Tools 10. I'm not getting any feedback yet for some reason. So, Play, Stop, FF, Rewind and the first 8 faders are working. I'm not sure how to handle the 16 faders on the C16 vs 8 on the HUI.

Is anyone out there using Pro Tools 10 who wants to work with me on mapping the C16 controls to HUI?

Cheers!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 14 Jun 2016 21:12:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

I just got feedback working for the faders in Pro Tools. I also should have each 8 faders from a C16 showing up as a separate HUI with its own Midi port, up to 16 HUIs. I just have some testing to do.

Cheers!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 25 Jul 2016 14:38:55 GMT
[View Forum Message](#) <> [Reply to Message](#)

As far as I can tell, the ASIO driver is done.

There is one issue that I can't seem to fix: Pro Tools 10 locks up if more than 8 faders are mapped via the C16 HUI mode.

Using more than 8 faders with Mackie Control mode under Harrison Mixbus works fine.

I tested by temporarily disabling everything C16 related in the driver except the ping reply (which is required), and Pro Tools still crashed with more than 8 faders enabled, so I'm almost 100% certain it's a Pro Tools bug.

I have been working on adding an MME wrapper around the ASIO driver, embedded in the parisAsio.dll. This wrapper would still be single client and only available to 32 bit applications, but it would allow using a couple of channels of the PARIS hardware with applications that don't support ASIO. If this looks like it's going to take too long, I'll drop it for now. I've got the output

side almost ready to test.

I also have to put together an installer.

That's where we're at.

After that, I'm going to work on a re-write of the scherzo driver for use with a 64 bit ASIO driver.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [story](#) on Mon, 25 Jul 2016 18:00:33 GMT
[View Forum Message](#) <> [Reply to Message](#)

Amazing! Would a 64bit Asio driver then also work with Pro Tools 12? If yes, how is it even possible to get such stoneold hardware run on 64bit, you must be a genius.

And: Are the 8 faders in HUI mode bankable directly from the C16? Or does it mean that there are only 8 faders available altogether? Thanks

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 25 Jul 2016 19:27:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Story,

Yes, a 64 bit ASIO (Which is not what I'm about to release) will work with Pro Tools 12. I have a copy of Pro Tools 12 in anticipation of testing the driver against it. Having said that, I expect a 64 bit version to take a 2 or 3 years to write. I'm thinking of coupling it with completely replacing the ParisStudiControlLib.dll file and moving that functionality into the Scherzo.

The PARIS hardware is actually really good. It transfers data via DMA in 64 sample buffers. It took me a while to figure out how to synchronize the ASIO buffer switches to this "Big Loop" in the EDS card, but it works out great.

As for the HUI, this is what I did:

Each bank of 8 C16 faders appears as a Midi Port. So, there is one midi in and one midi out for each 8 faders of a C16 (2 input ports and two output ports per C16), up to a maximum of 16 midi ports, or 128 faders. If I select more than one of these Midi ports in Pro Tools 10, Pro Tools locks up after a little while.

Doing almost the same thing in Harris Mixbus (MCP mode vs HUI mode) works fine.

I'll take one more look at it, but I really, really tried already, and I'm 99.9999% certain there is nothing wrong in my code.

You can still have as many tracks as you want in Pro Tools, you can only control them with the first 8 faders on the C16. The bank up and down buttons work. Transport controls and the jog wheel all work, too.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [story](#) on Mon, 25 Jul 2016 20:21:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

Allright, sounds good. So I can bank the first 8 faders through as many channels as my session has. That's really great and not much of a problem in my view.

So how about Cubase/Nuendo. Do these work in 32 bit mode ASIO? Does the C16 also work here?

And one last question: If I start the Paris Hardware in ASIO mode can it still be used with the PARIS application at the same time or is it "either ... or"?

Kudos for taking the workload of programming 64bit. That is huge undertaking then. U never seem to lose your passion for the Paris Hardware which is remarkable in itself.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 25 Jul 2016 23:56:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Story,

I don't have Cubase/Nuendo to test, unfortunately. But, if they support either HUI or MCU, they should work with the C16 just fine.

Did you want to beta test to be sure?

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [story](#) on Tue, 26 Jul 2016 11:24:50 GMT
[View Forum Message](#) <> [Reply to Message](#)

TBH, I don't use Cubase right now but I intend to do use it again with the Expert Sleepers Midi Interface. To use Cubase with Paris I would use the ADAT Sync of the RME Multiface anyways, so I guess my question was more theoretical. If I have the Setup working which should be in a couple of months I would definitely give it a try to see how Cubase works with the Paris Hardware.

So can the Paris Application run simultaneously with the Asio on the hardware? I guess not?

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 26 Jul 2016 12:14:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm sorry that I missed that question, Story.

The driver is built on top of the PSCL, which is single client. So, only one application can access the hardware at once.

That's probably what we want for low latency anyway. In order to share the hardware, another layer of buffering would need to be added in kernel mode.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 27 Jul 2016 02:29:58 GMT
[View Forum Message](#) <> [Reply to Message](#)

Well, I just tried disabling just the ping reply in the HUI code path, and everything seems to work fine with 16 channels of C16. I may just leave the ping reply off. Pro Tools will throw an error with a checkbox option to ignore future errors. After that, everything works fine.

Or, I may find a better fix. Anyway, Pro Tools 10 looks like it will have as many C16 faders as we have C16 faders.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [story](#) on Wed, 27 Jul 2016 10:22:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

So Cool!

Subject: Re: ASIO DRIVER current status ?
Posted by [n0samples](#) on Thu, 28 Jul 2016 06:24:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

So if Paris can't be run in the background, does that mean you can't use the ad/da to use hardware with the new DAW? Only the c16 as a controller?

Sorry if I missed it. I'd like to run reaper with 16 I/O for the production stage to then bounce to Paris for mixing.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Thu, 28 Jul 2016 11:20:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi N0samples,

The ASIO driver takes over the PARIS hardware and makes all the DA and AD available to the ASIO host in addition to the C16.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Sat, 30 Jul 2016 19:45:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

The ASIO driver is a means of using a different app to front-end your PARIS hardware than the original PARIS app. The new app (you can choose from a wide range) replaces the PARIS app.

You can already use the PARIS app and another app at the same time without the ASIO driver, as long as you have a sound card you can use for the second app. Just go to the other app and choose the other sound card as its output and feed its outputs (analog or digital) into PARIS inputs and sync the two apps using any of the established methods.

Subject: Re: ASIO DRIVER current status ?
Posted by [n0samples](#) on Wed, 21 Sep 2016 02:34:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

This is pretty awesome. But for those in 64 bit DAWs, do you think there might some commercial workaround to get it to work in a 64 bit environment similar to wrapping a 32 bit plug-in?

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 21 Sep 2016 18:02:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi N0Samples,

In theory, this would be possible, but the mechanics of going from a 32 bit process to a 64 bit process would add a lot of latency. I expect at least 3 ms. I'm not aware of anyone trying to do it.

Just to update, I've been working on bug fixes over the summer.

I think I just fixed the last one this past week. There was an issue with using expansion cards and an external clock. It turns out that expansion cards need to be disconnected and reconnected when the clock source changes.

I also just fixed a bug that involved setting expansion inputs and outputs to -10 or +4.

The biggest one was the issue that only manifested in Windows 10, and usually only when using 16 bit streams. I haven't seen it since I made a change about three weeks ago.

There was also the issue with Cubase that is fixed. That bug also affected the ASIO plugin for Windows Media Player. Listening to my flac collection through media player using the PARIS hardware is absolutely awesome.

I'm planning to do some work on the scherzo next, in preparation for a 64 bit ASIO. It's going to be a while though. Having two kids to look after takes time away from other adventures.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 18 Oct 2016 16:57:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi All,

I just compiled my first build of an installer for the ASIO driver package. I'm going to test it over the next few days. If all goes well, I'll release it right away.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Kim W.](#) on Tue, 18 Oct 2016 17:39:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

You bloody ripper!! (said with an Australian accent...)

Subject: Re: ASIO DRIVER current status ?
Posted by [Studio111](#) on Tue, 18 Oct 2016 17:44:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike,

We need a "Like" button!

Don

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Wed, 19 Oct 2016 13:36:52 GMT
[View Forum Message](#) <> [Reply to Message](#)

We need a "Mike Audet" holiday!

Subject: Re: ASIO DRIVER current status ?
Posted by [Amuse](#) on Sun, 30 Oct 2016 23:47:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

I just read this entire thread again from scratch, Mike you're a legend! I look forward to the release "soon"

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 31 Oct 2016 00:27:22 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thanks so much, Amuse! I got a nasty cold a week ago Friday, and it's been hard to shake. It's slowed me down a bit. But, I haven't had a single issue with the driver myself in over two months of testing. I'm so excited to finally get this out.

I know that soon is a loaded word around here, but this is definitely happening!

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Mon, 31 Oct 2016 13:10:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

@Mike
when you will sell the driver on your page ?

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 31 Oct 2016 17:12:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Daniel,

I'll have it up as soon as I can.

I've tested the installer on Windows 10 64. I have to test on a 32 bit Windows as well as Windows 7 64. I've found a couple of minor things that I just fixed - The version number and year on the scherzo driver were wrong. They're fixed. I also have to write a simple readme file.

I'll aim for next weekend. It's the very final stretch.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Tue, 01 Nov 2016 06:53:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

Great ! to read this and now in German JUBEL,FREU,GEIL.....(english: happy, joy, wicked)

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sat, 05 Nov 2016 01:49:50 GMT

[View Forum Message](#) <> [Reply to Message](#)

I've been working on something half way between a readme file and a manual. I'm not trying to cover every little detail, but I'm hoping it gives enough information for all the features to be found and used.

One thing I haven't done is map out every C16 button and what C16 modes they work in. I'm hoping this won't be necessary. The faders, mutes, soloes, transport, and jog wheel work in all of them. Reaper OSC has a signal for every button. It just wasn't possible to map them all to Mackie equivalents (HUI and MCP) because the control surfaces are just too different. I did my best.

If anyone has time to look it over, this is what I have so far.

I'm going to test the installer on an 32 bit Windows this weekend. It's working great on 64 bit Windows.

All the best!

Mike

File Attachments

1) [PARIS ASIO.pdf](#), downloaded 1140 times

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Sat, 05 Nov 2016 02:12:29 GMT

[View Forum Message](#) <> [Reply to Message](#)

As always Mike, If you need Win 7 x64 testing, shoot me an email.

Subject: Re: ASIO DRIVER current status ?

Posted by [mono](#) on Wed, 09 Nov 2016 16:25:05 GMT

[View Forum Message](#) <> [Reply to Message](#)

Really looking forward to the Asio driver!

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Wed, 09 Nov 2016 18:21:11 GMT

I found a small bug in the installer that related to 32 bit installs. It's fixed. I just added a warning dialog for when there is no interface on the master card. One beta tester is having a bit of trouble with the installer, and he's very kindly checking out the registry entries to see if I made a mistake.

It's the very final stretch.

I'm listening to 54-40 through Soundforge Audio Studio 10 right now. The PARIS hardware sounds beautiful.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 07 Dec 2016 18:23:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi all,

I'm sorry that this has taken longer than I expected.

Some beta testing uncovered a bug in the 24 bit mode at 64 samples that I hadn't seen on my system. I've moved where the IRQ is fired in the main loop that runs on the EDS cards, and made some other adjustments to accommodate that. The change gives more time for the buffer switch to complete. I've added a 32 bit transfer mode, too.

I also fixed a bug relating to the IF2.

If the testing comes back good, its done.

Before I release this, I'd like to revisit a post that I made a while back. A latency testing utility was reporting less than 64 samples latency with the driver. That utility wasn't accurate, unfortunately.

Harrison Mixbus reports about 600 samples of latency at 64 samples, 32 bit transfers. That's just over 13 ms. There appears to be a fair bit of additional buffering inside the EDS1000 card and the MEC.

Ultra low latency will still require the PARIS application, but I've found playing electric guitar through the ASIO driver at 64 samples to feel fine.

I hope this doesn't pose a problem for anyone.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [excelav](#) on Sat, 10 Dec 2016 05:48:44 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Mike,

Is the over 13 ms. latency issue in other programs or is it just in Harrison Mixbus? Just wondering if it is mainly hardware or software related.

James

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 11 Dec 2016 02:13:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm only testing with the Harrison Mixbus latency tool.

I find it kind of strange, though. I'm patching the audio streams in the exact same way that the PARIS application does, except I'm bypassing the mixer. I should be getting less latency, not more.

I found a bug on the inputs side that was adding an extra buffer of latency (don't ask). The latest figures from Harrison Mixbus at 64 samples, 32 bit are:

S/PDIF on MEC: 478 samples- 10.839ms
Main In/Out: 535 samples - 12.132ms

I just discovered this morning a bug that affected non-master cards. It turns out that the main voice engine loops weren't synchronized between cards. They were close, but not quite the same. I spent so much time getting the main ASIO loop synchronized with the main loop in the EDS card, but I was only in sync with the first one. I just changed the EDS voice engine to synch them. So far, it's testing good.

This has definitely been a challenge.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [excelav](#) on Sun, 11 Dec 2016 22:29:37 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey Mike, thanks for the response and all your hard work. It's too bad Edmund wouldn't release the code and the notes, it might have given you more insight into how Paris gets the low latency. I know you'll get it figured out.

Thanks again Mike!

James

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 11 Dec 2016 23:05:52 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi James,

Thanks for your kind words. I've been thinking about it all day.

This isn't Edmund's work. I think this was done by guys at Ensoniq.

Here is a comment from patchdef.e2, part of the ESP2 code that runs on the cards:

```
// The Sharemem in Scherzo is at 200000. The Patchbay is the first thing in memory.  
// In consists of small buffers (patchpoints) that revolve in the ESP2 modulo fashion,  
// around the whole patchbay. The voices need larger buffers, for buffering to and from  
// the PCI bus. These buffers have to be big enough to "amortize" the variation in  
// fill time due to 1. PCI latencies 2. frame and stream boundary processing.
```

```
/* A Playback patchpoint/buffer has 3 regions:  
   A 64 word patchpoint "delay" area  
   the 128 wordfetch-ahead buffer.  
   A 64 word overflow area.  
A Record patchpoint/buffer has no delay region.  
A DSP writes to the patchpoint at the base of the buffer.  
The next 128 words are the buffer.
```

So, it looks like there is some significant buffering in the EDS cards for disk based voices that isn't there for live inputs that go through the mixer. It may need to be there because of the PCI bus.

The patch bay is the big area of memory that is used by everything. If I change it, all the code that runs on all 6 ESP chips is affected, and potentially broken.

Down the road, if there is interest in this, we can look at incorporating the PARIS mixer for direct monitoring and effects. As it is, the latency is still very low, and we can always track in the PARIS app and mix using ASIO. It's just not the 3 - 6 ms I know I was hoping for.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [thesandbox1](#) on Mon, 06 Feb 2017 04:45:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

Mike,
any updates on the ASIO driver or where it might be posted?
Matt

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 06 Feb 2017 13:16:35 GMT
[View Forum Message](#) <> [Reply to Message](#)

I'm still testing with bigger systems (more than two cards) I just added a forth card into my expansion chassis, and I'm testing.

I ran into a problem where slaved cards were running their DMA loop out of sync with the master card. At 64 samples, the master card would work fine, but the other cards would be intermittently garbled. I think I have it fixed.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [thesandbox1](#) on Mon, 06 Feb 2017 18:00:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks Mike,

I pretty much shut everything down about 2 1/2 years after our daughter was born and we moved over the summer last year. Things are starting to settle down a bit and although probably not get into anything too big again doing outside work I would like to start playing around again on some personal stuff for me and a few others. I still have a 2 MEC 4 Card system in a Magna and was running reaper along side of it on a dual core XP system with your newer drivers (as of 2-3 years ago anyway). I seem to have things at least opening back up and playing again but would like to catch up on the latest and perhaps in the coming months even do a newer comp build and would love to try using the I/O of the MECs with Reaper and such. Thanks again.

Matt

Subject: Re: ASIO DRIVER current status ?
Posted by [mono](#) on Tue, 21 Feb 2017 16:23:26 GMT
[View Forum Message](#) <> [Reply to Message](#)

story wrote on Tue, 26 July 2016 13:24TBH, I don't use Cubase right now but I intend to do use it again with the Expert Sleepers Midi Interface.

I got my MEC now working with Reaper.
Next thing i wanna test is running an ES-40 on the MEC's spdif port.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 14 Mar 2017 01:36:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

I have an update.

I've spent the last few months chasing down a bug that surfaced when I went from a two card setup to a four card system. I wanted to test with more cards, and I'm glad that I did.

I think I've finally fixed it. I say "think" because the bug is truly random. Things could work perfectly 10 times in a row, or they might not work properly 3 out of 4 times. I've literally restarted my PARIS system hundreds of times in the last few months trying to track the problem down.

I found an ESP2 assembly language instruction that randomly just doesn't work. I've replaced that one instruction with two other instructions, and it appears solid. I've been restarting PARIS for hours now, and it's working. Hallelujah!

Has anyone with a multi-card setup noticed that every once in a while a non-master card's audio just doesn't play? This bug must have affected multi-card setups with the PARIS application, too. I've been more a PARIS programmer than a PARIS user for the last number of years. I honestly can't remember if this happened to me or not. I only had two cards back when I was recording a

lot, so maybe I just missed it.

We're very close.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 17 Mar 2017 00:45:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

OMG. I spoke to soon.

It looks like the instruction is fine. The problem appears to be that the main clock runs backwards some times, causing the instruction to be triggered more than once on some cards.

I'll keep testing...

Subject: Re: ASIO DRIVER current status ?
Posted by [anfallszonen](#) on Sun, 19 Mar 2017 09:52:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello Mike!

The bug you are talking about happens in my 3 card system and is solved by switching an other card as master then back again. It is a bug i lived with for ten years and now I think off it as a friend.

All the best for your fantastic work!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 19 Mar 2017 12:01:05 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanks so much, anfallszonen!

I've been starting the ASIO driver over and over for days now, and I haven't had a single issue.

I think it might be finally done. I'm just going to test a little more to be sure.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Wayne](#) on Thu, 23 Mar 2017 18:57:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

Yes. I thought I had been opening/closing a project too fast and the previous project had not thoroughly cleared. The whole submix would not play audio. Happened just this week.

And/or after adding or swapping an DSP insert on a channel, occasionally that channel/track would not play audio.

My fix in both cases was to quit PARIS, end the process in the task manager, and do a Windows restart and PARIS restart. This has cleared the problems every time.

Wayne
1 MEC (16 in - 8 out)
3 EDS (SWD expansion)
Win 7-64

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sat, 22 Apr 2017 19:15:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

Just an update...I just finished more work on this. Thank you so much to those of you who are helping beta test this. I'm sure we'll find something to fix with this build.

So, I realized that I had misunderstood something about the ASIO spec when I first started the project. It took about 4 hours to fix it. That revealed an issue with playback starting before the clock had settled on my MEC...I fixed that.

I just modified the patch bay code to shave 192 samples of round trip latency off. At 16 and 32 bits (24 takes more), Harrison Mixbus now reports 343 samples round trip latency at 64 sample buffers. I've had no crackles or garbled audio here. Hopefully, that will be confirmed by others.

I'll do my best to get this out ASAP.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sat, 01 Jul 2017 14:32:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

I just released the ASIO driver.

Thank you so much to everyone who supported this project with testing, kinds words, and interest.

http://ensoniq.ca/catalog/product_info.php?cPath=27&products_id=46&osCsid=0cf0ceb611f24cf92459ec51f4187939

Happy Canada day!

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [Amuse](#) on Sat, 01 Jul 2017 17:44:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

Brilliant, congrats Mike!

I'm travelling abroad at the moment but look forward to trying this when I get home next fortnight!

Kudos,
Pete

Subject: Re: ASIO DRIVER current status ?
Posted by [kerryg](#) on Sat, 01 Jul 2017 21:32:18 GMT
[View Forum Message](#) <> [Reply to Message](#)

Truly awesome!

Subject: Re: ASIO DRIVER current status ?
Posted by [story](#) on Sun, 02 Jul 2017 15:02:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

A big thumbs up for hanging in there!!!!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 20 Feb 2018 15:54:39 GMT

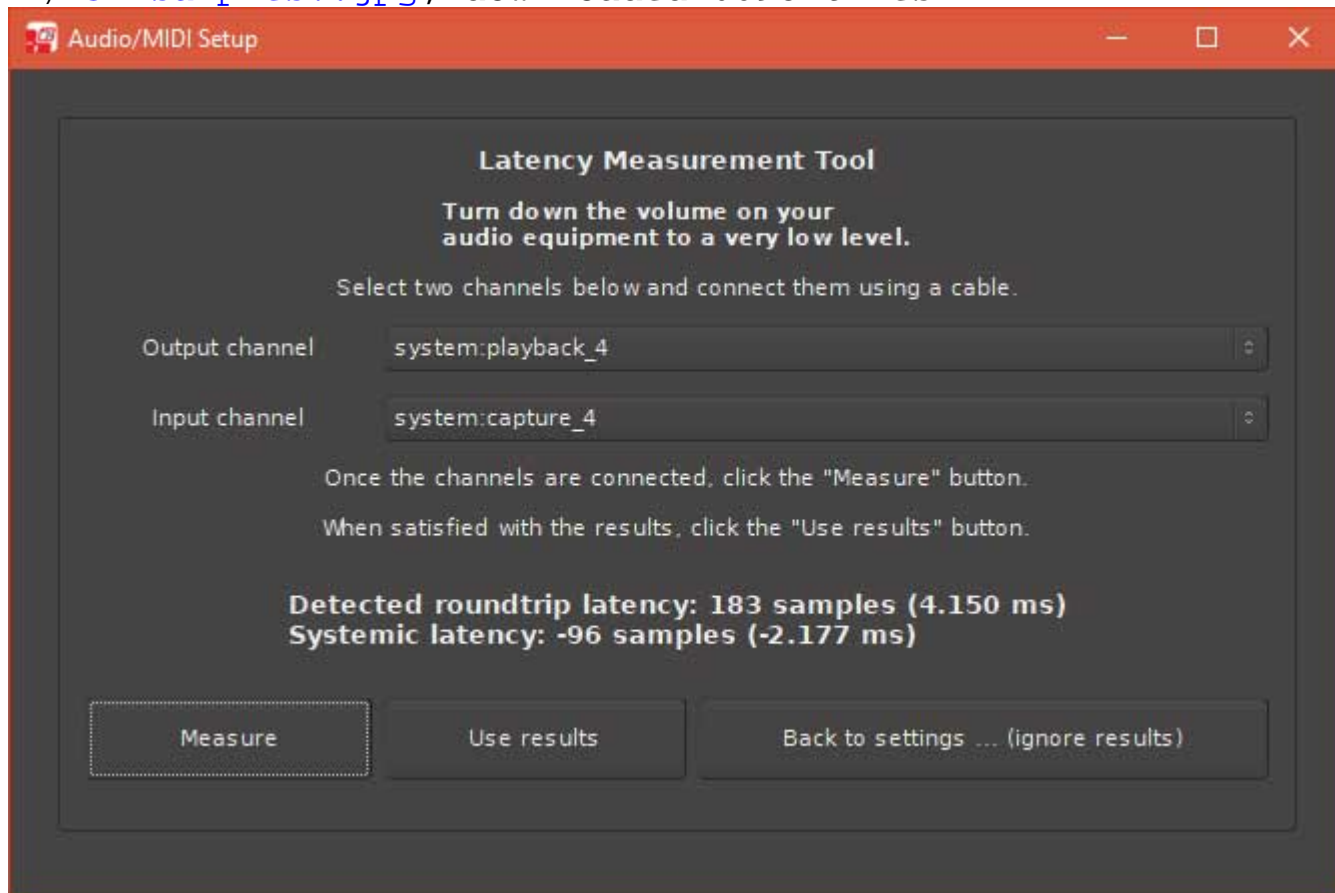
[View Forum Message](#) <> [Reply to Message](#)

So...I've been working on a few things...one of which is laying the groundwork for a new scherzo to support a 64 bit ASIO, but I took a bit of a detour and decided to see if I could clean up a couple of things in the 32 bit ASIO...and....

I got 32 sample buffer sizes working!!!

File Attachments

1) [32-samples!.jpg](#), downloaded 6098 times



Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Tue, 20 Feb 2018 21:31:18 GMT

[View Forum Message](#) <> [Reply to Message](#)

mikeaudet wrote on Tue, 20 February 2018 07:54

I got 32 sample buffer sizes working!!!

Great news Mike, I'm patiently waiting for the 64 bit ASIO..... and you should have a donate button somewhere on your site main page for folks to support your efforts!

Subject: Re: ASIO DRIVER current status ?
Posted by [laurent](#) on Wed, 21 Feb 2018 10:16:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

yes
make a donate

Subject: Re: ASIO DRIVER current status ?
Posted by [Kim W.](#) on Wed, 21 Feb 2018 12:17:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

Instead of "donating", just buy Mikes's plugins. They are far superior to the stock Paris plugs. You won't be disappointed! But then, if you are only going to use the asio driver for other programs, The "donate" button could be useful.
Me? I still use Paris (for recording and mixing) and love Mike's DP-4 ports. I use Samplitude for mastering and sound design. However for me, creating a nice lush mix, is done within Paris itself.

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Wed, 21 Feb 2018 18:42:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

i still wait for this one since cubase 9.0 was released.
The Old Asio 32bit have done there work very well, but all the plugins of works only with 64bit now... great news .

Best regards to community !

Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [76records](#) on Tue, 27 Feb 2018 20:29:30 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey folks!

Last time I checked this site was down and so glad its back up.
And seeing @Mikeaudet keep on pushing further development. This is amaaaazing.

Hey Mike, its MY your buddy from Canada MTL. Its so great to hear that you're working on the ASIO x64 bit version man. This is going to be epic when you'll finish it up. I'm really awaiting for this impatiently to really be able to jump back in Paris and explore back the beauty of this DAW.

And yes I agree with @WillTheWeirdo, a Donation button would be amazing as well.

I swear if a few of us would like to put money and take PARIS DAW code and develop it back up and make it more feature oriented for 2018, I'd be part of it and would invest what I can.

Its such an amazing sounding system that its hard to not look at it and want it to come back to life fully. Thank God we got Senor Mike doing the impossible possible.

Can't thank you enough.

Cheers

Subject: Re: ASIO DRIVER current status ?
Posted by [roginator](#) on Fri, 13 Apr 2018 13:23:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

Will ASIO driver in future support 48 in and 48 out (2 fully loaded MEC units).

I would love to use good old Paris as a multitrack recorder with my MCI console .. 24 is minimum, 32 is good, 48 would be perfect.

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Fri, 13 Apr 2018 14:24:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Each EDS card can support 24 simultaneous streams of audio between the EDS card and the PC.
A stream is either an input or an output.

So, you can have 12 inputs and 12 outputs per MEC, and the driver supports 8 cards, though I've only tested with 4 because that's all I have.

To get 48 inputs and outputs simultaneously, you would need 4 cards and 4 MECs.

48 inputs or 48 outputs can be done now with two cards. You just have to change the selections

in the control panel and use all the built in MEC I/O (including S/PDIF) and use an IF2. The MEC can only have two input and output cards active at once, for a total of 16 inputs and 16 outputs from expansion cards.

It might be possible to get 32 streams per card now that I've disabled the stuff that transfers mixer updates and meter information in the latest (not yet released) build of the ASIO. But, that would be the outside limit.

All the best,
Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [roginator](#) on Fri, 13 Apr 2018 20:58:02 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thanx a lot.

Great work.

I have 2 more questions,

1. Are there any plans for osx Asio drivers. That would be mind blowing to use reaper and paris on mac.
2. Is it maybe possible to use eds dsp power ane plugins in reaper like for example uad cards work?

Subject: Re: ASIO DRIVER current status ?
Posted by [roginator](#) on Fri, 13 Apr 2018 21:05:19 GMT
[View Forum Message](#) <> [Reply to Message](#)

mikeaudet wrote on Fri, 13 April 2018 07:24 Each EDS card can support 24 simultaneous streams of audio between the EDS card and the PC. A stream is either an input or an output.

So, you can have 12 inputs and 12 outputs per MEC, and the driver supports 8 cards, though I've only tested with 4 because that's all I have.

To get 48 inputs and outputs simultaneously, you would need 4 cards and 4 MECs.

48 inputs or 48 outputs can be done now with two cards. You just have to change the selections in the control panel and use all the built in MEC I/O (including S/PDIF) and use an IF2. The MEC can only have two input and output cards active at once, for a total of 16 inputs and 16 outputs

from expansion cards.

It might be possible to get 32 streams per card now that I've disabled the stuff that transfers mixer updates and meter information in the latest (not yet released) build of the ASIO. But, that would be the outside limit.

All the best,
Mike

You wanna say that with one mec and 4x8out cards we could have lets say 32 24bit outputs to console if inpuys are not in use...? That would be mmmmm peefect.

Subject: Re: ASIO DRIVER current status ?
Posted by [roginator](#) on Tue, 01 May 2018 15:18:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike

32 streams per card.. hmmm ... i thought even more is possible.. like 48 since it can see 24 in and out per MEC loaded with 2 in and 2 out cards!

so .. it would be great for example if it would be possible to have next configs per MEC

2 in cards and 4 out cards loaded MEC

so we can set for example ...

- 16 in 16 out on tracking (selected 2x8 in cards + 2x8 out cards)
- 8 in 24 out on tracking (selected 1x8 in cards + 3x8 out cards)
- 32 out with 4 out cards (for mixdown on console selected 4x8 out cards) .. in any of that cases its 32 streams in total per EDS + MEC!

Maybe to manage that by some kind of presets to select in asio setup! ..or something

another thing is ... I would die for APPLE OSX ASIO drivers .. that i would pay in gold !!

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 01 May 2018 16:47:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

There's nothing I can do about the hard limit of card streams. But, they can be switched in the control panel now to 24 in or 24 out per EDS card. I could add some kind of preset support. That would be interesting.

Lately, I've been working hard on getting a 64 bit version running. I have a lot of testing to do, and there is an issue I want to fix in the scherzo design that works but should be better, but...

I got Reaper x64 to play back audio from the PARIS ASIO today.

Too cool!

File Attachments

1) [first-64-bit-run.jpg](#), downloaded 5732 times



2) [first-playback.jpg](#), downloaded 6082 times



Subject: Re: ASIO DRIVER current status ?
Posted by [roginator](#) on Tue, 01 May 2018 17:05:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

WOW great !!!

thanx for all work Mike!

any chance to make ASIO for OSX maybe
that would be GOLD!

I would like to run Reaper and paris on OSX!

Subject: Re: ASIO DRIVER current status ?
Posted by [Will The Weirdo](#) on Tue, 01 May 2018 17:07:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

That's great news Mike, x64 is the future.... your hard work is appreciated!

Subject: Re: ASIO DRIVER current status ?
Posted by [76records](#) on Tue, 01 May 2018 19:08:07 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello @Mike

Wooooooooooooow, speechless I must say, now this is more than a great news. Its pure joy man. Your hard work is highly appreciated and words can not describe how thankful & lucky we are to have you in this amazing journey.

Really looking forward to try this with Studio One x64 bit.

Keep up the great work

MY

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 01 May 2018 21:47:38 GMT
[View Forum Message](#) <> [Reply to Message](#)

To answer an earlier question that I've been meaning to answer, it's not really in my plans to create a way to use the EDS1000 cards to load the Ensoniq effects. The source code for the effects loader was lost when Ensoniq shut down. The time it would take to reverse engineer the old code and rewrite it for 64 bits would be better spent doing something else, like maybe porting some of the effects to VST.

I'll try to make a long story short - I found some new functions that were added in Windows 10 to allow for lower latency streaming. I've roughed some code in, but I haven't even compiled it yet. The reason I haven't tried to compile it is that Microsoft didn't document some of it. I got on a mailing list for Windows audio drivers to ask if anyone knew about this one new function that

allows registering IRQs and threads as "streaming" resources. Nobody knew. I've emailed Microsoft's audio guy, and he hasn't replied yet.

But, the mailing list folks did know that there is a problem with the memory manager in Windows 10 - it's been there for 2 years - that if you wait long enough - and it could take a couple of hours - Windows 10 will block for upwards of 200 milliseconds. I didn't notice this in my testing, but I may have just gotten lucky in the sense that Windows didn't block on the CPU the driver was running on. Or, it might be specific to some chipsets. I'm not sure. This problem makes Windows 10 completely unsuitable for any kind of real time work, including audio. There are rumours that this was fixed in the April update, but I haven't heard anything for sure yet. To compare, Windows 7 blocks for 2-3 ms at most.

So, if I can't get these new functions to work and if Microsoft hasn't fixed this memory manager issue, I may start on an OSX driver. We'll see. My next step is using the PARIS mixer to implement direct ASIO monitoring so that we can get 64-ish sample latency no matter what the buffer size is for monitoring during recording. This, of course, depends on getting the 64 bit existing version debugged and ready first.

So, that's as short a long story as I can tell.

Subject: Re: ASIO DRIVER current status ?
Posted by [roginator](#) on Tue, 01 May 2018 21:55:11 GMT
[View Forum Message](#) <> [Reply to Message](#)

wow

great ,,,

I live for OSX driver !!

Subject: Re: ASIO DRIVER current status ?
Posted by [76records](#) on Tue, 01 May 2018 22:00:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

Stunning @Mikeaudet

Woow having the "PARIS MIXER" to implement direct Aiso monitoring... that will be just amazing

and I'm positive you'll make that happen.

Man Mike, when(if I may ask) do you think approx we should expect a first trial version of the x64 bit Win Asio Driver?

Now that we're talking x64 bit, i'm super excited and can't wait to turn my MEC up.

Keep up the amazing work,

Best,

MY

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Tue, 01 May 2018 22:10:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thanks, MY!

I should clarify - I'm not going to code a mixer app. I'm just planning to make something that takes the level and pan position that gets passed via the ASIO driver to implement direct monitoring. I want the thing to be simple to use. A second mixer is just a mess, in my view.

I'm not sure about a timeline. I have an online course starting Thursday, and I'm not sure how demanding it will be. I also haven't tested anything beyond playing back a two tracks of audio (Ian North - Beautiful City, one of the best songs ever) and opening the control panels. I have a ton of testing to do for the C16 (Midi and OSC), audio inputs, selecting channels, etc, etc. Plus, I haven't ported the ADAT card driver to 64 bits yet.

I'll have it ready as soon as I can, though. I'm excited to use it, too!

Subject: Re: ASIO DRIVER current status ?

Posted by [Kim W.](#) on Wed, 02 May 2018 13:24:43 GMT

[View Forum Message](#) <> [Reply to Message](#)

Guys. Support Mike.

He's doing great work.

If you don't want to donate, at least buy some of his DP4 plugin ports. They are far superior to the the stock EDS plugs.

Even if you don't use them straight away, some of you will go back to the sweet PARIS sound eventually, and his plugs will make your mixes shine more than ever. Do it whilst you can. Mike can't keep up his efforts forever. A little love, could give him some incentive to keep up his work.

Cheers,

Kim

Sorry Mike if this seems like ass kissing, but I for one, am a huge fan of your efforts.

Subject: Re: ASIO DRIVER current status ?
Posted by [thesandbox1](#) on Tue, 08 May 2018 12:45:14 GMT
[View Forum Message](#) <> [Reply to Message](#)

wow...great work...would definitely pay for the 64bit "update" as the 32bit seems to be working great with the MEC's. Finally been doing a little bit of personal tracking and testing again and seem to be using reaper more and more myself especially with Superior Drummer 3 now and some soft synths and would love just to move over to all 64 bit on my windows 7 machine.
Thanks again Mike!

Subject: Re: ASIO DRIVER current status ?
Posted by [76records](#) on Thu, 10 May 2018 23:23:12 GMT
[View Forum Message](#) <> [Reply to Message](#)

mikeaudet wrote on Tue, 01 May 2018 15:10Thanks, MY!

I should clarify - I'm not going to code a mixer app. I'm just planning to make something that takes the level and pan position that gets passed via the ASIO driver to implement direct monitoring. I want the thing to be simple to use. A second mixer is just a mess, in my view.

I'm not sure about a timeline. I have an online course starting Thursday, and I'm not sure how demanding it will be. I also haven't tested anything beyond playing back a two tracks of audio (Ian North - Beautiful City, one of the best songs ever) and opening the control panels. I have a ton of testing to do for the C16 (Midi and OSC), audio inputs, selecting channels, etc, etc. Plus, I haven't ported the ADAT card driver to 64 bits yet.

I'll have it ready as soon as I can, though. I'm excited to use it, too!

Hi Mike,

Take your time and it will be ready when you'll have it ready. I'm really looking forward to test this once you have something to get it tested. I have my MEC plugged, awaiting to fire it up and test it.

Best of luck mate,

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Thu, 10 Jan 2019 22:10:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey, All!

There's a 64 bit ASIO driver available at ensoniq.ca.

Enjoy!

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Sat, 12 Jan 2019 16:00:16 GMT

[View Forum Message](#) <> [Reply to Message](#)

You are the man Mike.

I'll pick this up next week in support.

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sun, 13 Jan 2019 13:00:09 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thanks so much, Will. But, what I really hope is that you will use it. I'd much rather keep you in the fold. I wish I'd been able to accomplish this sooner, but I did my best given family, school, and work. At least we got there.

I have more planned, too.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Sun, 13 Jan 2019 15:16:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

I still have a 1 EDS system around so it will get used from time to time, I've been downsizing PARIS but I'm thinking a PARIS Mastering setup might be in my future.

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sun, 13 Jan 2019 15:27:59 GMT

[View Forum Message](#) <> [Reply to Message](#)

Awesome! You know, with the ASIO driver, there really isn't a need for more than one card anyway. All the mixing and effects are done on the PC CPU. Unless one needs more than 24 streams at once, one card is fine.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [officialmy](#) on Sun, 13 Jan 2019 21:46:54 GMT
[View Forum Message](#) <> [Reply to Message](#)

mikeaudet wrote on Tue, 01 May 2018 16:10Thanks, MY!

I should clarify - I'm not going to code a mixer app. I'm just planning to make something that takes the level and pan position that gets passed via the ASIO driver to implement direct monitoring. I want the thing to be simple to use. A second mixer is just a mess, in my view.

I'm not sure about a timeline. I have an online course starting Thursday, and I'm not sure how demanding it will be. I also haven't tested anything beyond playing back a two tracks of audio (Ian North - Beautiful City, one of the best songs ever) and opening the control panels. I have a ton of testing to do for the C16 (Midi and OSC), audio inputs, selecting channels, etc, etc. Plus, I haven't ported the ADAT card driver to 64 bits yet.

I'll have it ready as soon as I can, though. I'm excited to use it, too!

Totally hear ya @MikeAudet. And let me Congrats you for the release of the ASIO driver mate, what a long journey you've been through and time & effort you've put on making this possible.

Honestly, congrats and I'm going to Donate mate and buy the drivers even I know you've sent them to me for Beta Testing and all.

Your efforts need to be supported because without you, this would never seen the DAY man.

You should be extremely proud & we are Proud of you.

Cheers

Subject: Re: ASIO DRIVER current status ?
Posted by [officialmy](#) on Sun, 13 Jan 2019 21:49:53 GMT
[View Forum Message](#) <> [Reply to Message](#)

Will The Weirdo wrote on Sun, 13 January 2019 08:16I still have a 1 EDS system around so it will get used from time to time, I've been downsizing PARIS but I'm thinking a PARIS Mastering setup might be in my future.

Hey @Will

I love the idea of having a Mastering Suite dedicated for PARIS. Thanks for the idea
Can't wait to get the new Drivers and fired up my PARIS MEC & Asio driver and use it with Studio One hahahah

And keep PARIS 3 just for MASTERING.

IDEa: This is just me dreaming. How I wish we could find someone like Mike who's also designer to maybe work on PARIS DAW software just to give it a little overhaul etc... man it would be just awesome. If some people would be open to jump on board, I'd be willing to invest I swear with other investors hahahha but this is just me dreaming.
If I win the lottery, I swear, I'll make this happen haahaaha

Cheers

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 13 Jan 2019 22:10:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi My,

Thanks so much for the kind words! I've tried really hard to get access to the PARIS.exe source code. I was told 'no.'

I need to clarify that I haven't used the PARIS mixer for direct monitoring in this release. I am going to explore that next. I've found that the 5.5 ms round trip at 32 samples is really not noticeable to me, but I'm going to work on the direct monitoring anyway.

I was planning to release this version last July, but I ran into a bug where multiple interfaces wouldn't initialize when using word clock after I switched to a newer compiler to do 64 bit builds. It took forever to fix, in part because I decided to re-write large sections of the PSCL rather than debug what was there. It's a lot easier to work on now.

All the best!

Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Wed, 04 Oct 2023 14:44:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

i have changed my OS from win 7 to win 10 and my driverelease is from 2016. The system needs a certificate.

Do i need to purchase a newer one from your webside ?

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 04 Oct 2023 22:45:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

The driver should just work. The certificate is embedded in the file.

Can you post the exact error you are getting?

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Sun, 08 Oct 2023 07:53:16 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

sorry for delay !

I get this Information under Propertis from the Manager.

"The digital signature of the drivers required for this device cannot be verified. A recent hardware or software change may have installed a file that is incorrectly signed or corrupted. It may also be malicious software from an unknown source. (Code 52)"

Hope thats helps ?

Best regards

Dan

File Attachments

1) [Ensoniq_issue.JPG](#), downloaded 4091 times



Subject: Re: ASIO DRIVER current status ?

Posted by [Kim W.](#) on Sun, 08 Oct 2023 12:13:36 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Daniel.

This may be a stupid question. But have you got time and date correctly set on your new PC?
That is the only scenario where I've had digital certificate issues.

Cheers,
Kim.

Subject: Re: ASIO DRIVER current status ?

Posted by [danielcornelius](#) on Sun, 08 Oct 2023 12:33:11 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thx for answer !

Ok, if this really the only way, set up my computer new ?
I haven't really time, but if i need , i do ;)

Best regards dan

Subject: Re: ASIO DRIVER current status ?
Posted by [Rich.Kelley](#) on Sun, 08 Oct 2023 19:09:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

I think there's a little miscommunication happening. I don't think Mike is saying that you need a new PC, or to setup your Win10 operating system from scratch, I think he's just literally asking if the time and date on your PC is set correctly? I believe if you have the time and date set to manual update, and it gets too out of sync with reality, Windows gets unhappy. I have had this time and date issue a couple of times when the time and date sync got change to manual somehow (not the PARIS issue, just generally). The easy fix if you're on manual is to change to auto updates of the time and date.

Hope that helps.

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Mon, 09 Oct 2023 12:21:42 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Rich,

Thx for answer fast. I will try IT Thursday, because i am on Holiday now.

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Mon, 09 Oct 2023 18:44:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

I plugged in my test machine that hosts older operating systems. I installed the first version of the ASIO driver on Windows 10, and the certificate was recognized.

I did have the date correct in Windows. Let us know if that solves the problem for you.

All the best,
Mike

File Attachments

1) [driver.png](#), downloaded 3057 times



Subject: Re: ASIO DRIVER current status ?

Posted by [danielcornelius](#) on Wed, 11 Oct 2023 11:15:12 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi @ all,

i try to correct the date. And deinstall the Hardware. Restart the Computer, but the same Issue popups :(.

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Wed, 11 Oct 2023 12:24:24 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi all,

the certificat issue do not pop ups in system manager :)... but i cannot chose the driver in cubase 12, because it isn't listet there.
Some one know whats wrong ?

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Wed, 11 Oct 2023 13:53:25 GMT
[View Forum Message](#) <> [Reply to Message](#)

It looks like Cubase 12 is a 64 bit application. The first version of the ASIO driver supported 32 bit hosts only.

I hope this helps.

All the best,
Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Wed, 11 Oct 2023 15:59:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

I have a 64bit version of paris driver... it seems so.
maybe a new start of the computer could help.

I can check this tonight or tomorrow !

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Wed, 11 Oct 2023 16:13:38 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Daniel,

The first release of the ASIO driver was a 64 (or 32 bit) kernel driver, but it was limited to a 32 bit application accessing it. The PARIS studio Control Library is the user mode part of the PARIS driver. I had to re-write much of it to make it work when built for 64 bits. The first version of the ASIO would run on a 64 bit Windows, but it only supported 32 bit ASIO applications or the 32 bit PARIS software.

I hope this helps.

All the best,
Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [danielcornelius](#) on Wed, 11 Oct 2023 17:33:31 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Mike !

I have the version 5.0.0.0 of driver. Is this the one you mean ?

Best regards
Dan

File Attachments

1) [driver version.JPG](#), downloaded 4091 times



he version 5.0.0.0 of driver. Is this the one you mean ?
ards

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Wed, 11 Oct 2023 18:15:58 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

i did find the latest driver 5.1.0.0 on my HD system. I have buyed it, in 2018 order number 130.

This one don't work right into my system ??? Device Manager Error Says : Code52

Best regards
Dan

File Attachments

1) Paris driver issu 5_1_0_0.JPG, downloaded 4183 times



Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Wed, 11 Oct 2023 18:57:43 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

Code 52 is:

Windows cannot verify the digital signature for the drivers required for this device. A recent hardware or software change might have installed a file that is signed incorrectly or damaged, or that might be malicious software from an unknown source. (Code 52)

You might have to disable secure boot to get Windows 10 to accept the signature. I thought that requirement was only for newly signed files, but that rule could have changed. My test PC is a

first gen core i7, so there is no secure boot to turn on or off.

If that doesn't work, I'd try to remove the scherzo from the device manager and delete the driver files when it asks. Then, re-install it. If it is still showing an error, make sure that the date is correct in Windows.

I'll also try putting my Windows 10 test PC online and update it to see if I get the error.

2018 would have been the first version of the ASIO driver. I began working on the second version in 2018 and finished sometime in 2019.

I hope this helps!

All the best,
Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Thu, 12 Oct 2023 07:14:21 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

the thing with "Boot secure off" works (word by word translation from German in English ;). The device manager shows, that is all right.

But Paris 2.1 don't start after booting the Paris Mec Hardware right (the computer froze often) and the Paris asio driver do not appear in Cubase 12.

What's going wrong with me here ?

Is my driver version too old ? You told me that you've worked till 2019 on a new driver. But the date and number of both versions are the same ? See my picture and yours, Driver 5.1.0.0 and Date 2016 10 31, from device manager?

Best regards
Dan

File Attachments

1) [Paris_5_1_0_0 Device Manager.JPG](#), downloaded 4165 times



Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sat, 14 Oct 2023 12:18:44 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

The PC should definitely not be freezing when loading PARIS 2.1. The version of the driver that I posted a screen shot of earlier is the first version of the ASIO driver. It supported a 64 bit Windows, but only a 32 bit ASIO host. There was a lot of work to do porting the user mode part of the PARIS driver to 64 bits. The second version came out in 2019 (I believe), and supports both 32 bit and 64 bot ASIO hosts, as well as a 32 sample buffer size. The change to allow 32 sample buffers required altering the firmware that runs on the EDS cards.

The order of install matters for the ASIO driver. The ASIO installer must be run after the

non-ASIO driver installer, as it updates components. If the older installer that includes the PARIS software is run after the ASIO driver is installed, it can replace files and create a mis-match between the kernel and user mode drivers.

Let me know if you'd like me to take a look over TeamViewer. The machine definitely should not be freezing.

I hope this helps.
Mike

Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Sun, 15 Oct 2023 15:59:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

i have bought the new Driver from your webside, i am glad to donate you in that way.
I have some issue, that i can't solve by myself now.
My Asio Host Cubase 12 freeze after choosing the Paris asio driver and the Paris Software too.

I have selected, Cubase 12 runs as Administrator.
What could it be, that booth freeze after starting the MEC ?

The MEC is loaded with 1x Input Card, 1X Output Card an 2x Adat.
These days is no CS16 used.

The Device Manager shows, all is raedy and alright.

If you know nothing about that, is it possible to show with team Viewer into my system ?

Best regards !
Daniel

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Sun, 15 Oct 2023 16:13:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

How is the EDS card connected to the computer?

All the best,
Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [danielcornelius](#) on Sun, 15 Oct 2023 19:41:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

I am using the pci expansions Slots of the Motherboard. I am using the old Asus Z97 C ..with 32GB Ram

Best regards

Daniel

Subject: Re: ASIO DRIVER current status ?

Posted by [mikeaudet](#) on Sun, 15 Oct 2023 20:08:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

That should be completely fine. Is the PC blue screening or locking up?

If it's locking up, I'd try re-seating the card. It might also be helpful to start PARIS without the MEC connected just to see if it starts up. This would eliminate a bad SCSI cable from being the cause.

If you are getting a blue screen, let's got together on TeamViewer so that I can check out the crash dump.

All the best,

Mike

Subject: Re: ASIO DRIVER current status ?

Posted by [danielcornelius](#) on Mon, 16 Oct 2023 19:06:37 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

i believe its time to meet via Teamviewer.

I had start Paris software an Cubase 12, both times it is freezing,when the MEC is off. The Courser of mouse don't moves.

The computer have to be restart by using the reset button.

Do you mean, reinstall the Win OS should be help ?

Best regards

Dan

Subject: Re: ASIO DRIVER current status ?
Posted by [mikeaudet](#) on Tue, 17 Oct 2023 01:39:04 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Dan,

Unfortunately, freezing almost always indicates a hardware error. Generally, if I make a mistake in the driver code, the blue screen of death results. The only exception to this that I've ever seen is in power management code (when the PC is waking up), which isn't in the version of the driver you have. I'd remove the PCI card from the slot and put it back it. If you have another PCI slot, it might make sense to try the other slot.

The PARIS app will open if only one card is in the system and there is no interface attached. If you have another card, I'd try just the one card with no interface, and see if PARIS.exe starts up. make sure PARIS.exe is running as administrator. If it isn't running as administrator, PARIS.exe will crash, but I have not seen it make the PC freeze.

I've attached an image of the damage to the female SCSI connector on an EDS 1000 card from a 50 pin cable with a bent pin. Take a look at your card and MEC connectors to see if anything looks like this. The power for the 442 flows on one of the edge pins, and if the pin gets bent, it can apply power to signal pins on one of the chips on the card or the MEC and damage it.

I installed the second version of the ASIO on my test PC under Windows 10, applied all Windows 10 updates, and it worked fine.

I'm happy to take a look on TeamViewer tomorrow after work (after 6:00pm Eastern Daylight Time).

I hope this helps,

Mike

File Attachments

1) [bent pin damage.jpg](#), downloaded 8801 times



Subject: Re: ASIO DRIVER current status ?
Posted by [danielcornelius](#) on Tue, 17 Oct 2023 10:57:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Mike,

i try another card first and if that does not work, i have to install team viewer !

Best regards
Dan

Subject: Re: ASIO DRIVER current status ?

Posted by [Will The Weirdo](#) on Wed, 01 Nov 2023 03:41:44 GMT

[View Forum Message](#) <> [Reply to Message](#)

I've been buying up older PARIS hardware and I've found several non used older EDS1000 cards had issues until I cleaned the pin contacts. After a little eraser work the EDS1000 cards worked without errors. I also found plugging and unplugging cables a few times helped fix hardware errors too. The hardware was built to a high standard but it seems most of the metal contact parts need cleaning every few years.
