Subject: Burning in a new DAW tonight
Posted by DJ on Wed, 17 Jun 2009 05:31:43 GMT
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It's running an Intel i7 920 CPU. I am absolutely floored at the power this DAW has. So far, it's extremely stable with an RME PCI host (for Multiface), a MADI PCI and an HDSP AES32 card running in a Magma chassis interfacing the computer via PCI. It's also got a UAD-2 Quad and a Duende PCIe onboard. I'm recording 56 tracks right now at 32k buffers (0.07ms) latency with about 5% CPU usage and approximately the same percentage of VST resources being used in Cubase 5. This is the first time in my history of running a native app that it performed at low enough latency to come anywhere close to the Paris system latency witout fretting about some frigging VST spike in Cubase. It's also the first time I've seen anything like a correlation between the Windows CPU usage metering and the Cubase VST performance meter. Usually, the Cubase VST performance meter is much higher than the Windows CPU musage meter. Coincidence?

Subject: Re: Burning in a new DAW tonight
Posted by kerryg on Wed, 17 Jun 2009 06:54:58 GMT
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So what does 32 samples/0.07ms latency translate to in actual roundtrip latency? Because, at least in theory, that does sound like we've finally arrived at the PARIS roundtrip numbers with processing overhead left over for actual work.

It has been an *impressively* long journey getting here.

Subject: Re: Burning in a new DAW tonight
Posted by rick on Wed, 17 Jun 2009 10:33:15 GMT
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sounds cool deej and it only took 12 years to get to where we once were. seriously good on ya mate.

Subject: Re: Burning in a new DAW tonight
Posted by DJ on Wed, 17 Jun 2009 14:03:21 GMT
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kerryg wrote on Tue, 16 June 2009 23:54So what does 32 samples/0.07ms latency translate to in actual roundtrip latency? Because, at least in theory, that does sound like we've finally arrived at the PARIS roundtrip numbers with processing overhead left over for actual work.

It has been an *impressively* long journey getting here.

I'm thinking that with the 64k buffers, plus an additional 64k internal buffer that RME doesn't want to talk about much, but is still there, plus the AD/DA latency, the real world latency is going to be somewhere in the neighborhood of 3 ms when all is said and done. That's about as good as it's ever going to get with the hardware I've got. It is inaudible to me, but still about twice what Paris achieves. One thing that always bugged me about the native DAW running at 128k buffers (which is nominally 1.5 ms latency) is that when the extra 64k internal buffering and the AD/DA is taken into account, we're talking something along the lines of almost 7 ms. It's immediate enough to allow for tracking without the distraction of an audible slapback and is something that I would have probably never even thought twice about had I not ever used a Paris system, but since I got spoiled by the Paris (non) latency, there is just a teeny bit of difference between running at 64k buffers and 128k buffers that is audible to me when A/B'ing. 64k buffers give me that tightness and immediacy in the cans that I remember with Paris when tracking........and it is looking like this is finally a reality. One thing about i7 systems though is that they are a bit tempermental, at least with my hardware. I got my system through Chris and (again) it was a good thing. I hit a few snags that had be baffled and it seems that no one on earth is running my exact hardware configuration so there was no guarantee it would work with any computer. Without the knowldege base at ADK relative to which motherboards would be likely to work, or not, I'll still be sitting here scratching my head.

Subject: Re: Burning in a new DAW tonight
Posted by DJ on Wed, 17 Jun 2009 14:06:57 GMT

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DJ wrote on Wed, 17 June 2009 07:03kerryg wrote on Tue, 16 June 2009 23:54So what does 32 samples/0.07ms latency translate to in actual roundtrip latency? Because, at least in theory, that does sound like we've finally arrived at the PARIS roundtrip numbers with processing overhead left over for actual work.

It has been an *impressively* long journey getting here.

I'm thinking that with the 32k buffers, plus an additional 32k internal buffer that RME doesn't want to talk about much, but is still there, plus the AD/DA latency, the real world latency is going to be somewhere in the neighborhood of 2.9ms when all is said and done. That's about as good as it's ever going to get with the hardware I've got. It is inaudible to me, and close enough to what Paris achieves to satisfy me. One thing that always bugged me about the native DAW running at 64k buffers (which is nominally 1.5 ms latency) is that when the extra 32k internal buffering and the AD/DA is taken into account, we're talking something along the lines of a little over 3.7 ms. It's immediate enough to allow for tracking without the distraction of an audible slapback, but isn't quite as tight in the cans when tracking. It is something that I would have probably never even thought twice about had I not ever used a Paris system, but since I got spoiled by the Paris (non) latency, there is just a teeny bit of difference between running at 32k buffers and 64k buffers that is audible to me when A/B'ing. 32k buffers give me that tightness and immediacy in the cans that I remember with Paris when tracking........and it is looking like this is finally a reality for a native DAW. One thing about i7 systems though is that they are a bit tempermental, at least with my hardware. I got my system through Chris and (again) it was a good thing. I hit a few snags that had me baffled and it seems that no one on earth is running my exact hardware configuration so

there was no guarantee it would work with any computer. Without the knowldege base at ADK relative to which motherboards would be likely to work, or not, I'll still be sitting here scratching my head.

Subject: Re: Burning in a new DAW tonight
Posted by rick on Wed, 17 Jun 2009 15:59:14 GMT
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well once my mac dies (and it will from the liquid cooler failing and bathing the processor..seems to be the way my model dies) i'll probably go back to a pc based system or just say effit. i can't seem to wrap my head around the prevailing "if it sounds like sh&t and has no musical merit" we won't play it. man i miss the days of musicianship and musicians vs noise is king and takes no talent.

good luck with your endeavour.