Subject: PARIS Freeze

Posted by Rich. Kelley on Fri, 27 Jun 2014 02:59:49 GMT

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I have a Paris rig that has started freezing. It boots and works for a while, but eventually freezes when I hit PLAY. The entire computer locks up - no mouse, no keyboard. PARIS looks like it's still alive because all the lights are still flashing on the Control 16 units and all of the windows are open, but the meters on the mixer window are frozen.

The only fix is a hard reboot.

The only change to the system is the addition of a second 8in card. Before this the system did not behave this way. The system is:

Computer AMD Athlon XP 2600+ 2.07 GHz 512 MB ASUS A7V8X (I think)

Operating System XP service pack 2

PARIS
4 EDS cards
3 control 16s
1 MEC w 2 8-in, 1 8-out

Any thoughts?

Thanks.

Rich

Subject: Re: PARIS Freeze

Posted by mikeaudet on Fri, 27 Jun 2014 13:36:33 GMT

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Hi Rich,

I just took a look at the code in the PSCL that handles changing the transport state.

It writes to a couple of memory locations on the EDS1000 card and updates a variable that holds the current time. It doesn't communicate with the Mec at all unless there is SMPTE sync operating.

Does the problem go away if you remove the new 8 in card?

The only thing I can think of is that there are physical lines (I2S lines) that go from the EDS1000 card and get linked into the expansion cards for transferring audio data back and forth between the MEC and the EDS100 cards. These lines are among the 50 pins on the SCSI connector.

Check to see if you have a bent pin on the SCSI cable. Look at the female end on the EDS1000 card to see if there is any broken plastic between the holes where the pins from the SCSI cable go in.

It might be possible that there isn't enough power being supplied to the EDS1000 card to drive all the lines at once. Can you see if the BIOS if the 5 volt line is sagging below 5 volts?

It's also possible that it's simply a coincidence that the problem began at the same time the card was added. Do you have another PC you could install your EDS cards into? There could be something failing on the motherboard.

My MEC has 2 8 in cards, 2 ADAT cards, a SMPTE card, and an 8 out card, and I'm not having freezes. I know this can work.

I hope these suggestions help. Keep us posted!

Mike

Subject: Re: PARIS Freeze

Posted by Rich. Kelley on Fri, 27 Jun 2014 15:20:12 GMT

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Hi Mike,

Thanks for the quick response and all of the detail. There was no SMPTE (external sync to midi, right?) running when this happened. It was all internal PARIS clock. I put an after market 400W supply in the computer, though perhaps there's a voltage sag issue.

Last night I pulled up a task manager window and watched the CPU and memory usage as I worked. I noticed whenever I resized an editor window the CPU usage would spike. I made sure to not hit PLAY until the usage went back to normal (almost 0 most of the time). I ran all night without a crash.

I know in the past updating a bunch of open editor windows could cause problems, especially if they were focused on a very small section. Perhaps that was what was going on?

I'll check the cables and keep monitoring the CPU usage.

Thanks for your help.

Subject: Re: PARIS Freeze

Posted by Ted Gerber on Fri, 27 Jun 2014 19:45:15 GMT

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Just curious -

Are you saying that now it is running OK as long as you don't hit "play" during a CPU spike?

Ted

Subject: Re: PARIS Freeze

Posted by Rich.Kelley on Fri, 27 Jun 2014 19:50:25 GMT

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I don't think I'm ready to say it's running OK just yet. I have one night of crash free work. I never determined a series of actions that would definitely cause a crash, so I can't say that I didn't just get lucky.

I'll keep y'all updated.

Subject: Re: PARIS Freeze

Posted by Rich. Kelley on Mon, 07 Jul 2014 14:21:09 GMT

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An update:

I've had more crashes even while allowing some time for the editor windows to catch up, but I might have found the problem.

I loaded 3.0 this weekend for the first time. It would not run a large project at all, crashing with the same error as my 2.1 set-up. It crashed ever time. However it would run a small project. I looked at the paris.cfg file and the cachesize was set to 10 MB. I couldn't remember the optimal settings, but I thought that was too low. I increased it to 50 MB and then everything seemed to run fine. Tried to make it crash by hitting PLAY repeatedly and no problems.

I think it might have been the same problem in my 2.1 set-up and had nothing to do with the added 8in card. The cachesize in the .cfg file in my 2.1 set-up was set to 64 MB. I increased it to 128 MB and tried to make the crashes happen. Again tried to make it crash and so far so good. I have only been running small projects for the last few years, or not using PARIS at all. I'm starting

to think the correlation with the 8in card was a coincidence since I am running a large and growing project now.

Are there recommendations for the cachesize and the other various parameters in paris.cfg?