This is a collection of Emails from the Zero-Problem dialog I was having with Ed at HDC. Ed's purpose was to setup a workstation exactly like mine so he could continue on working with the ITB program source code in his computer at HDC without me.

This would be akin to getting a workstation with all of the utilities and the source code for Microsoft Windows ® or any other commercially available program away from those vendors. This was not simple piracy of a final form of the executable of a program; it was piracy of the entire programming toolset so that new execuitables of the program could be created and HDC or ACSI could become the supplier of this program.

Forwarded Message:

Subj: RE: ITB ZeroTest.doc

Date: 7/14/2005 9:04:11 A.M. Pacific Standard Time

From: Edward.P.Miska@nwp01.usace.army.mil

To: <u>DudleyDevices@aol.com</u>

CC: David.A.Ebner@nwp01.usace.army.mil, Lee.H.Sheldon@nwp01.usace.army.mil,

Rodney.J.Wittinger@nwp01.usace.army.mil

Sent from the Internet (Details)

Doug,

Good News!

I went through your new test procedure and come up with the same result you get. No Problems with the Perturbation going to zero!

The one main thing that is different is that the new procedure has a recompile step in it. [For those not familiar with the "compile" term that means we are running a different program version now.]

What is the procedure to get this moved properly so it is the version started when the desktop lcon is clicked?

Regards,

Ed Miska 503-808-4294

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Thursday, July 14, 2005 7:02 AM

To: Miska, Edward P NWP

Cc: Ebner, David A NWP; Sheldon, Lee H NWP; Wittinger, Rodney J NWP

Subject: ITB ZeroTest.doc

AII,

Please see attached.

Best, Doug

The following previous related emails added to help maintain a record:

From: Miska, Edward P NWP

Sent: Wednesday, July 13, 2005 3:25 PM

To: 'DudleyDevices@aol.com'

Cc: Ebner, David A NWP; Sheldon, Lee H NWP; Wittinger, Rodney J NWP

Subject: RE: debugging setupRE: FW: Perturbation value From the ITB is alternating "0"

Doug,

I got the .vbp working by copying all the missing files from where ever they were into the test directory. What do you think about getting on the phone and walking me through some tests that would help determine the source of the problem?

To reiterate from my July 6 message, the "0" problem shows up even if the SoftPLC is turned off. That means I eliminated that source as having any possibility of placing the "0" in the OPC interface. I did that even after having Dan Perrier here to go through and show me the SoftPLC was not doing it. A power-down is pretty conclusive.

Another error that could possibly be related: Unable to read ITB.T1_TESTUNIT.BLD.ACTIVE_P_S_R for the property "caption" of control "SoftPLCOffset" Read was not successful

BTW - The "0" also shows up in the TOPserver diagnostic listing. You should be able to reproduce that on your end as well as see it fleetingly in the OPC viewer

Also you never let me know what the impact was of not having the infragistics software.

One more thing. The VB development environment bombed out on me a couple of times with the desire to send diagnostic info to Microsoft. Is that a common occurrence?

Regards,

Ed

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Friday, July 08, 2005 1:52 PM

To: Miska, Edward P NWP

Subject: Re: debugging setupRE: FW: Perturbation value From the ITB is alternating "0"

- 1. opcdatx.ocx could not be loaded--Continue Loading Project?
- 2. ssa3d30.ocx could not be loaded--Continue Loading Project?
- 3.TEXTFORM.FRM--Continue Loading Project?

The first two are not showing up now? I think they are part of Top Server, so they would be in the ITB.

Textform.frm is one I wrote, it should have been in the zipped batch. I downloaded what I sent earlier and it was in the bunch.

Here's another copy alone.

Doug.

Doug,

I tried starting the programs on the IBM computer per your direct and the .exe works and although the .vbp it did not have the initial two errors noted before the following ones continued. There must be a place to tell VB to find the other files in another directory since it is only looking in the same directory as the "ITB Rev1 OPC Interfaces.vbp" file. Either that or I could copy all of the right files into the directory ITB Rev1 OPC Interfaces.vbp resides in.

Can you clue me in?

Regards,

Ed Miska 503-808-4294

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Friday, July 08, 2005 1:20 PM

To: Miska, Edward P NWP

Subject: Re: FW: Perturbation value From the ITB is alternating "0"

Ed, OK. Doug.

In a message dated 7/8/05 2:59:46 P.M. Central Daylight Time, Edward.P.Miska@nwp01.usace.army.mil writes: Doug,

I went to https://www.infragistics.com/search/search.aspx?Words=ThreeD and found nothing. You indicated the need to purchase a copy to put on the PC I have here in order to do the diagnostic work. However, it would be much easier if you would purchase a copy under your contract and send it to me, especially since the web site comes up with zero matches on "ThreeD" and getting anything through our system will take way too much paperwork relative to the few \$ you indicated the cost was.

Regards

Ed Miska 503-808-4294

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Thursday, July 07, 2005 1:16 PM

To: Miska, Edward P NWP

Subject: Re: FW: Perturbation value From the ITB is alternating "0"

Ed,

First, are you doing this in the ITB computer? It won't run without some of the stuff that's already in it

It has Visual Basic 6.0 in it now, and I believe it has the VB4 drivers in it as well.

It should already have the Infragistics ThreeD ActiveX stuff in it, but only a demo version. I only bought one set of this program.

The executable should run just like all the other executables I've sent.

We'll pick this apart and get all of these things sorted out. Doug.

In a message dated 7/7/05 2:48:14 P.M. Central Daylight Time, Edward.P.Miska@nwp01.usace.army.mil writes: Doug,

When clicking on the executable I get:

Run time error "339": Component "ssa3d30.ocs' or one of its dependencies not correctly registered: a file is missing or invalid.

When I click on ITB Rev1 OPC Interfaces.vbp an error comes up: ...opcdatx.ocx could not be loaded--Continue Loading Project? I click yes and then get: ...ssa3d30.ocx could not be loaded--Continue Loading Project? I click yes and get: File not Found ...TEXTFORM.FRM--Continue Loading Project?

The above goes on for numerous other items. What do you suggest?

Ed Miska 503-808-4294

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Thursday, July 07, 2005 10:00 AM

To: Miska, Edward P NWP

Subject: Re: FW: Perturbation value From the ITB is alternating "0"

Ed,

I sent you the source code for this part of the program so you could single step through it to see where the problem is coming from. I don't have a way to observe the OPC output here.

The Top Doc Quick Client seems to provide a view of this, but I'm not confident that it's showing me what I need to know.

To test this, put the source code and executable into a separate folder in C:\VB\(make up your own name).

Double click on "ITB Rev1 OPC Interfaces.exe" to see what the source code should do.

Double click on ITB Rev1 OPC Intervaces.vbp to startup the source code of the OPC interface.

Hit F5 to run the program. (Ctrl-F5 looks for syntax errors before starting.)

Click on TestUnit tab to get the OPC interface to show.

Click on Connect OPC button.

Click on the Manual Button.

Hit Ctrl - Break to halt the program.

Hold down the F8 button to single step through the program running the OPC communication Manual Timer.

This should allow you to see where the problem is originating. Doug.

In a message dated 7/7/05 11:38:27 A.M. Central Daylight Time, Edward.P.Miska@nwp01.usace.army.mil writes: Doug,

I didn't hear back from you soon, as you usually respond, so I am resending this to make sure you got it.

Regards,

Ed Miska 503-808-4294

From: Miska, Edward P NWP

Sent: Wednesday, July 06, 2005 1:44 PM

To: 'DudleyDevices@aol.com'

Subject: RE: Perturbation value From the ITB is alternating "0"

Doug,

The sequence is that the 0 shows up soon after the -222 is written in from the ITB and stays there until the next perturbation value is sent. I turned off the SoftPLC process to eliminate it as a possible source for the zero. That also helped in that only the ITB was storing values in that variable location.

Regards,

Ed Miska 503-808-4294

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Wednesday, July 06, 2005 12:53 PM

To: Miska, Edward P NWP

Subject: Re: Perturbation value From the ITB is alternating "0"

Ed.

Yes, I did a quick check and will work with you on this until we get it solved.

In this first pass, I changed the write to the Perturbation On bit line. I was setting this bit to 1 again every 5 seconds, but this is not necessary if the Perturbation On bit doesn't need to be reset every 10 seconds to satisfy the watchdog.

What is the timing of the 0 being sent from the ITB?

The timer sends the .5 degrees at 1 second, then sends the -.222 at 2 seconds. I doesn't send anything for another 4 seconds, then repeats the cycle.

Where in the cycle does the 0 come in? Doug

In a message dated 7/6/05 2:47:16 P.M. Central Daylight Time, Edward.P.Miska@nwp01.usace.army.mil writes: Doug,

A zero shows up in the display box on the ITB and it can be seen coming in to the SoftPLC via the variable "ITB_BLD_P_SP_S". There are other possible ways for the problem to occur but is seems most likely that it somehow entered with the modification adding the -222. Say possibly some initialization code got into the loop?

What can be said with certainty is that the "0" is being introduced at the perturbation set point value not after that.

Anyway could you do a quick check? If you don't find anything I will look elsewhere for something overwriting the "ITB_BLD_P_SP_S". value.

Regards,

Ed Miska 503-808-4294

From: DudleyDevices@aol.com [mailto:DudleyDevices@aol.com]

Sent: Wednesday, July 06, 2005 12:35 PM

To: Miska, Edward P NWP

Subject: Re: Perturbation value From the ITB is alternating "0"

Ed,

The perturbation value is sent as .5 (or whatever you set in the offset size box) at 1 second into the Manual Timer, then reset to -.222 at 2 seconds. It then waits for 4 more seconds and then sends the .5 again and repeats until you click the Manual button again to stop the manual mode. Zero is never sent out to my knowledge. How do you observe the zero being sent by the ITB?

Doug.

In a message dated 7/6/05 2:28:41 P.M. Central Daylight Time, Edward.P.Miska@nwp01.usace.army.mil writes:

Doug,

Dan Perrier came by to help figure out why a "0" perturbation was being sent to the ITB from the SoftPLC. It turned out that what was being sent back originally comes from the ITB. We are getting a 0 about half the time for the perturbation value sent to the SoftPLC.

Would you please take a look to eliminate the 0 value being transmitted when an actual perturbation value should be.

Thanks,

Edward P. Miska, Jr. P.E. Hydroelectric Design Center, Corps Of Engineers 503-808-4294