Common Software Errors and Solutions

**TCP Controller fails to connect:**

Read Error Out code 5, Write Error Out code 56.

Solution: Something very strange is happening with the TCP ports. Make sure both dusty and the AccelNet machine have the correct IP addresses (192.168.1.107 and 192.168.1.101 respectively). For the AccelNet, open up the ‘terminal’ (which is really Konsole) and use the command hostname -i to get the IP. If they do and problems persist, disconnect the AccelNet from the Internal Network, and have it connect to the External. Then unplug from External and reconnect to Internal. If problems persist, combine this with reboots.

**Batch Processor:**

Error 7 occurred at list folder in batch processor.

Solution: Open windows explorer. Is there a red X on the waveforms server? If yes, double click it to reconnect.

**Waveforms Server:**

Unable to access waveforms server. “Microsoft Windows Network: The network path was not found”

Solution: Are you trying to access from either argos or dusty? Other machines are prevented from connecting to the waveforms server by the Ubiquiti firewall.

Does argos have an IP address of 192.168.1.107? Does dusty have an IP address of 192.168.1.105? If not, use the Ubiquiti Unifi software to see why.

**Ubiquiti Unifi:**

“Starting Unifi Controller,” then briefly “Port 8080 is used by other programs” and then “Start-up failed.”

Solution: The standard port 8080 was a poor choice on Ubiquiti’s part for communication with the firewall router. Set it to something else.

See <https://help.ui.com/hc/en-us/articles/204910084-UniFi-Advanced-Changing-Default-Ports>

Close all instances of the Unifi Controller.

Modify the system.properties file located in something like C:\Users\dusty\Ubiquiti UniFi\data

Delete the # and space before the line “unifi.http.port=8080” and change it to something that isn’t a commonly used TCP port (see <https://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers>). Why not try 8079?

**Dust Source Control:**

On startup Error -201003, Device Device cannot be accessed. Possible causes:

Device is no longer present in the system.

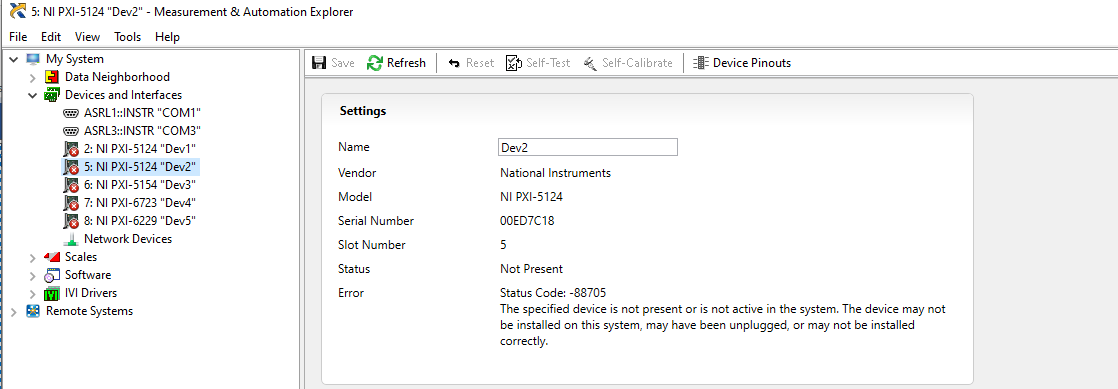
Device is not powered.

Device is powered, but was temporarily without power.

Device and/or chassis driver support may have been removed.

Device is damaged.

Solution: The PCI card that connects to the PXI crate is not connected or not working properly. If so, NI MAX probably looks like this:



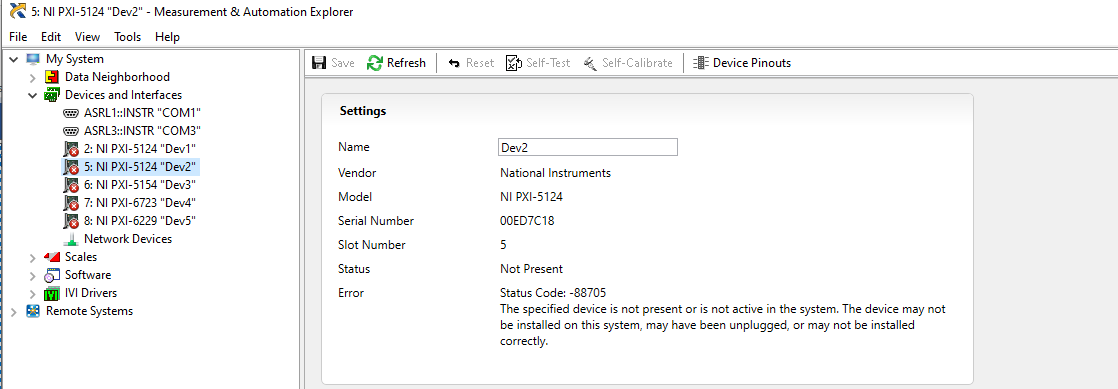
As of 2020, we use a PCI to PCI-e adapter chassis, which is a large black box by startech. The old PCI card we have cannot be placed on the modern motherboard of the new dusty machine. The external chassis connects, very strangely, with a DVI cable on the back center of dusty.

Turn off the PXI crate, turn off the PCI external chassis, then turn off dusty. Once all three are powered down, turn on the PXI crate, then the PCI chassis, and then wait ten seconds before turning dusty back on.

**FPGA Controller:**

On startup Error -63195, the handle for device communication is invalid.

Solution: The PCI card that connects to the PXI crate is not connected or not working properly. If so, NI MAX probably looks like this:

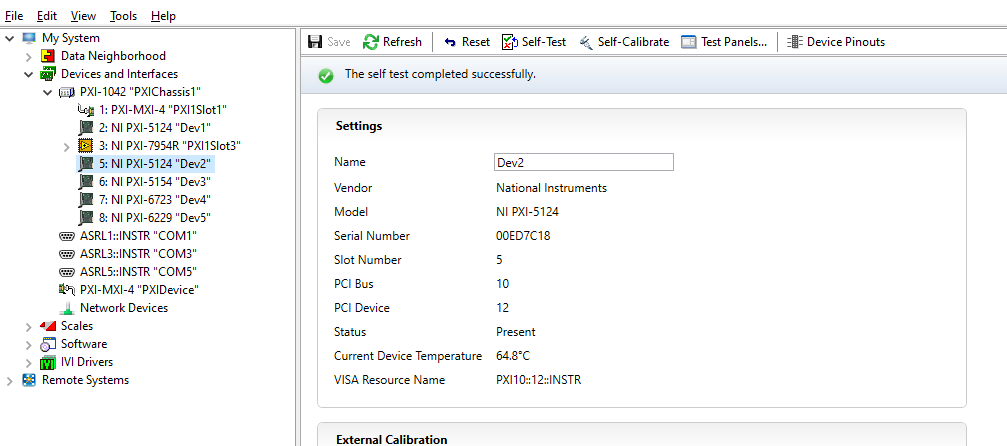


**BigAccDAQ:**

Error -89125: No registered trigger lines….

Solution: Open NIMAX. Look at the Devices and Interfaces dropdown. If the Chassis is listed as “Unidentified PXI Chassis” or something like that, right click it and identify it as a PXI 1042 (note, this is accurate as of Aug 2020. By the time you read this there may be a different chassis). It’ll likely lose the individual cards once you do so, but that’s OK. Reset the chassis a few times until the cards pop back up.

If the chassis is already correctly identified, make sure the individual cards are correctly identified and have the correct device numbering. As of Aug 2020, it looks like this:



**Database Connection:**

Crashes immediately upon opening. “Access violation” in the body of the error message.

Solution: This is caused by rampant misuse of global and local variables, thus creating race conditions. To solve, try opening Query Dust Event by itself. This will open database connections with much less dependence on global/local variables and works most of the time. Once it’s opened and successfully pulls data from the database (once the plot window is populated), you can open Database Connection. Once that’s connected to the database (once the experiment settings, dust settings, dust operator, etc. populate), you can close Query Dust Event if you want.

If Query Dust Event also crashes with Access Violations, try again. If it still crashes, reboot. If problems persist, run the database\_connection\_test.vi in Accelerator/Database IO/ a few times. If no errors show up in the error indicator, try Query Dust Event again. If errors show up in the test vi, you’ve other problems. Are you connected to impactwave? Can you ping 192.168.1.102? Does MySQL Workbench successfully talk to the database? Is dusty’s IP address 192.168.1.105?