

TECH NOTE :: Starting measurement data recording with a trigger from a Siemens PLC through PMX

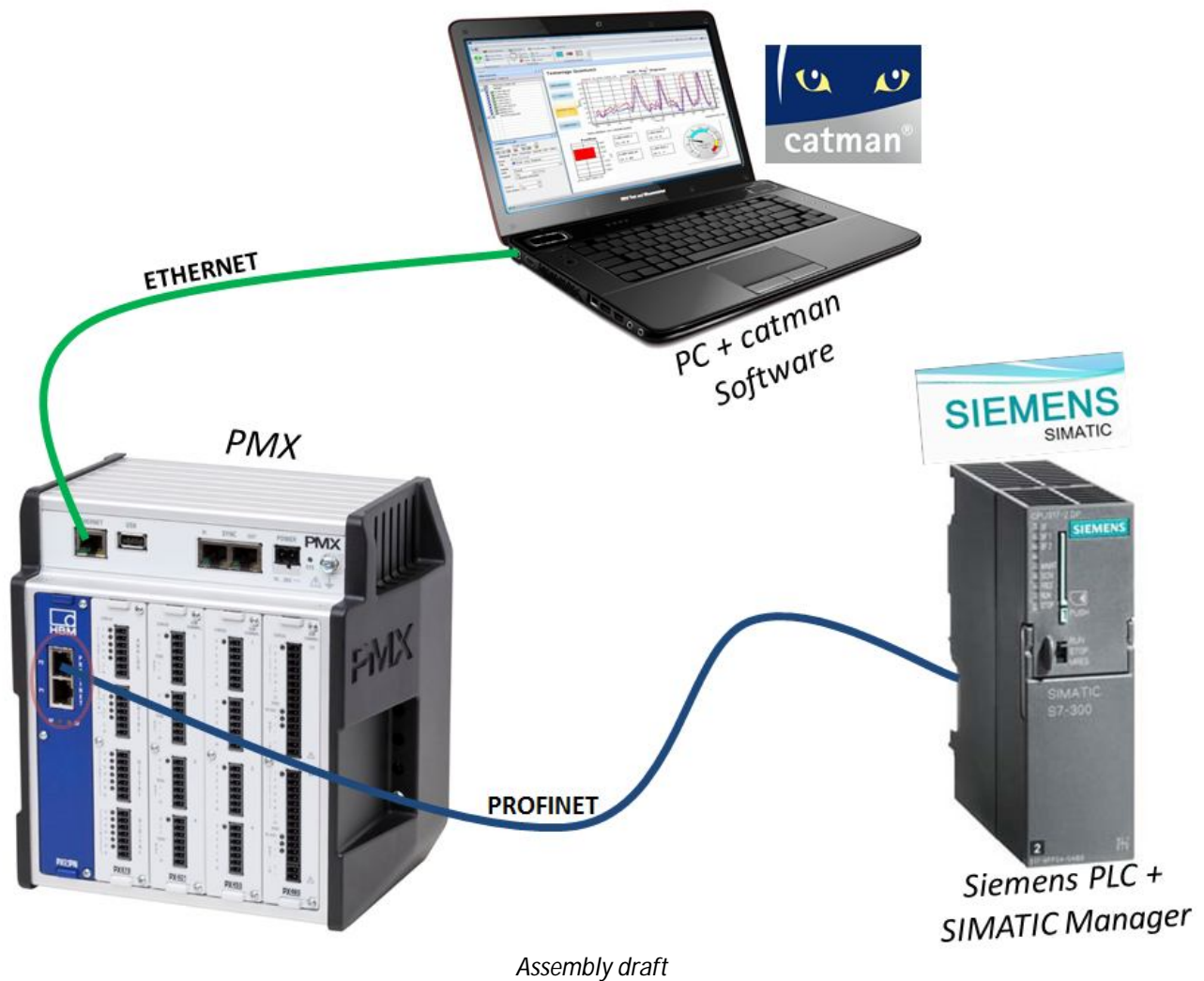
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Status: HBM: Public

Brief description

This is a guide to create a catman file which receives measurement data from a PMX and controls data-saving with a trigger sent from a Siemens PLC. Basic knowledge about catman and the SIMATIC Manager is required.

Important note: Use catman version 3.4 or higher! In older versions of catman the PMX is not yet implemented.

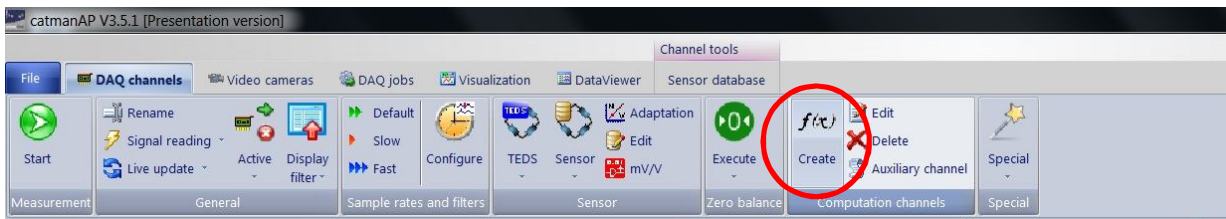
Note: Real-time-visualizations in catman are not controlled by the trigger, only the point in time when data should be saved.



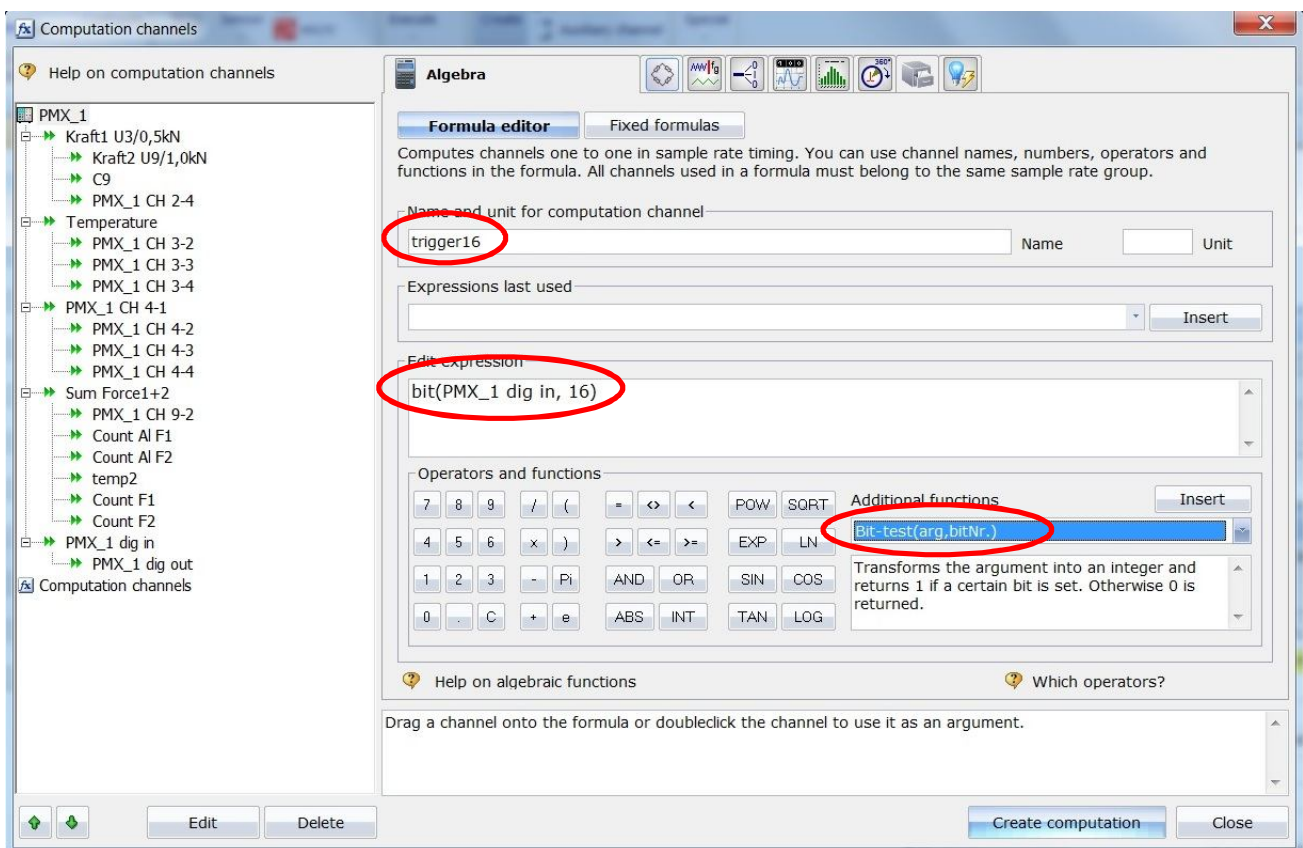
catman

Create a computation channel

In the tab “DAQ channels” click “Create” in the “Computation channels” section.



The computation channel is used to isolate one bit from the digital input of the PMX. In this example the bit with the significance 16 (mask 0x00010000) is looked at. Complete the window as follows and confirm with “Create computation”.

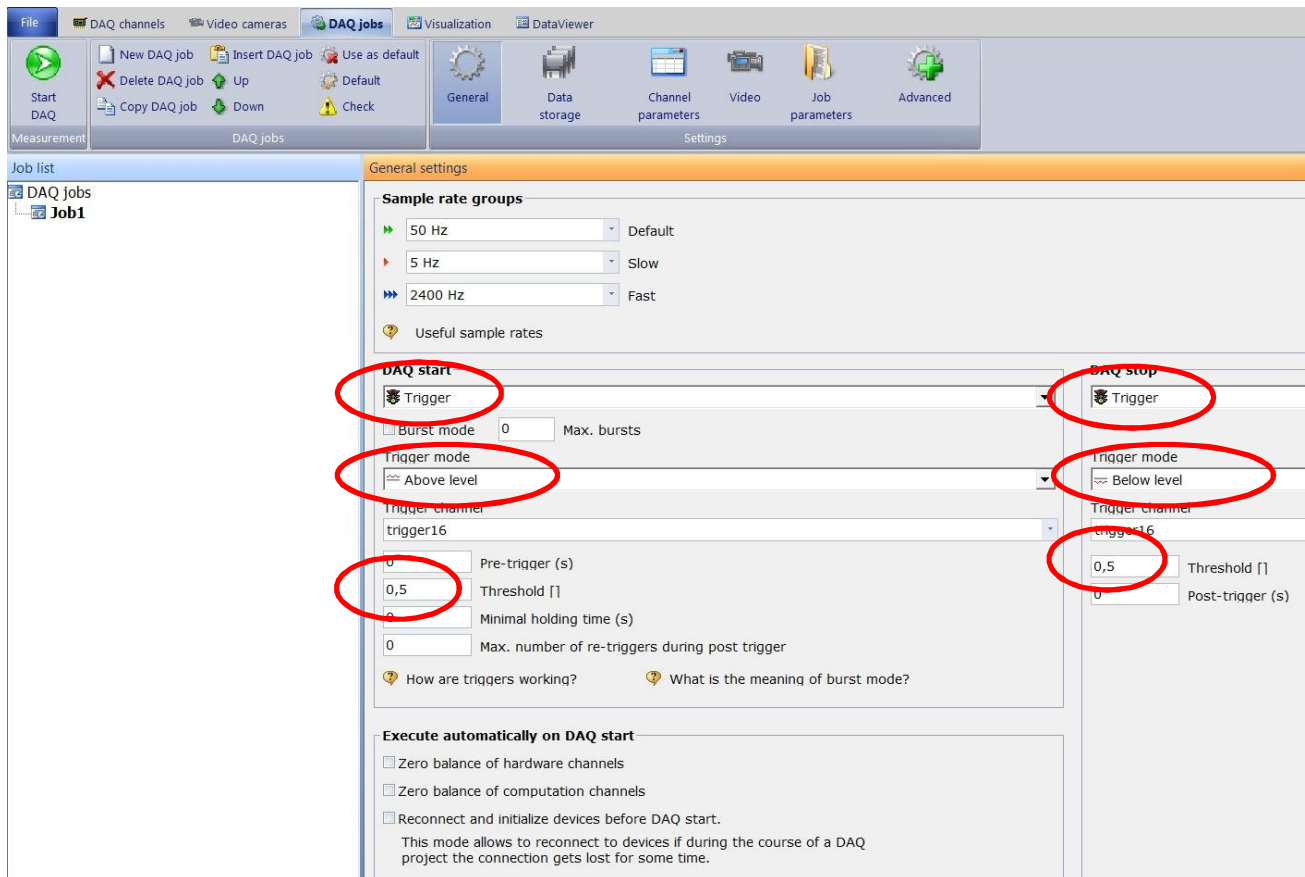


As a result the computation channel is added to the end of the list.

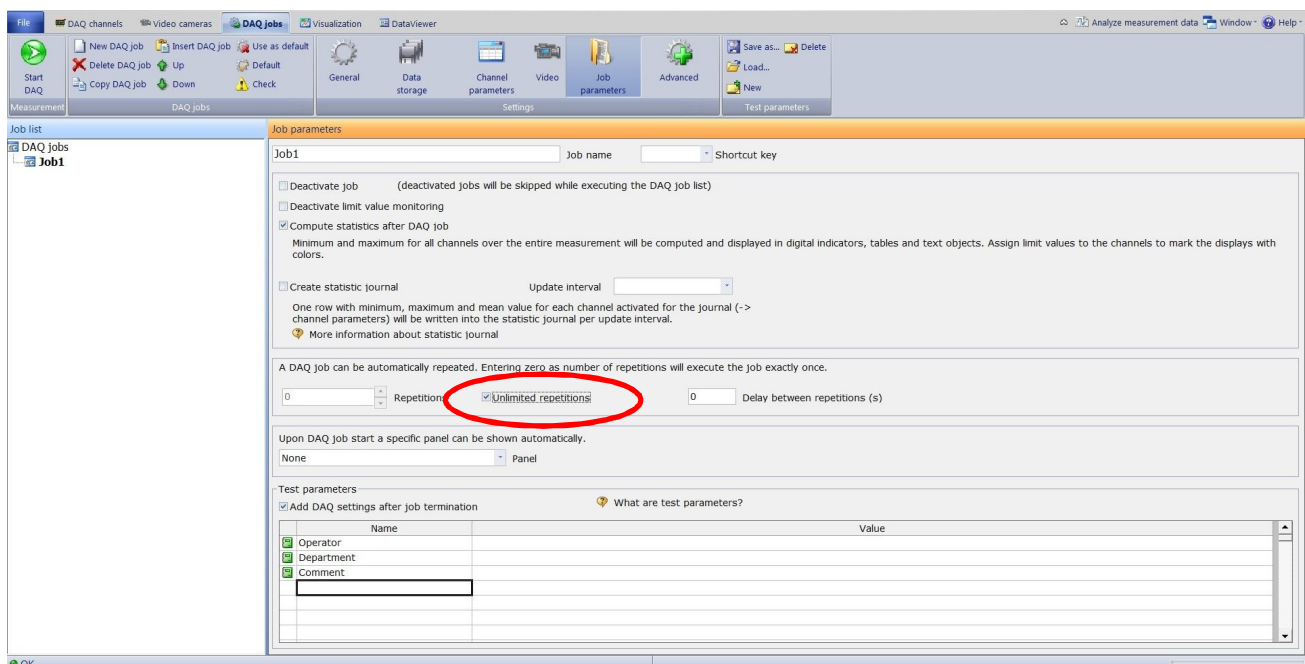
PMX_1 dig in	50 Hz / Filter: Auto	10-1	Unknown	0.00000 bin
PMX_1 dig out	50 Hz / Filter: Auto	10-2	Unknown	0.00000 bin
Computation channels				
trigger16			bit(PMX_1 dig in, 16)	0.00000

Create a trigger

Under the tab "DAQ jobs" in the section „General “ you can find the settings to start and stop a measurement. Choose "Trigger" for both settings and define a trigger mode (start if "Above level", stop if "Below level"). As trigger channel declare the newly created computation channel (here: "trigger16"). Because the trigger is digital, a threshold value of 0,5 does make sense.



Furthermore, the checkbox for "Unlimited repetitions" has to be set in the tab "Job parameters".

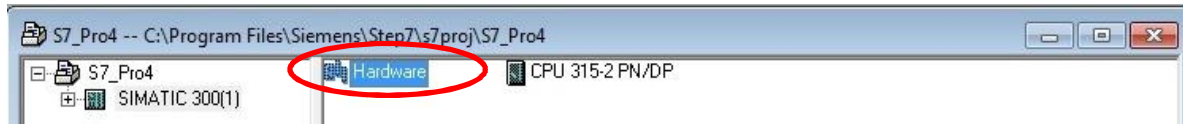


SIMATIC Manager

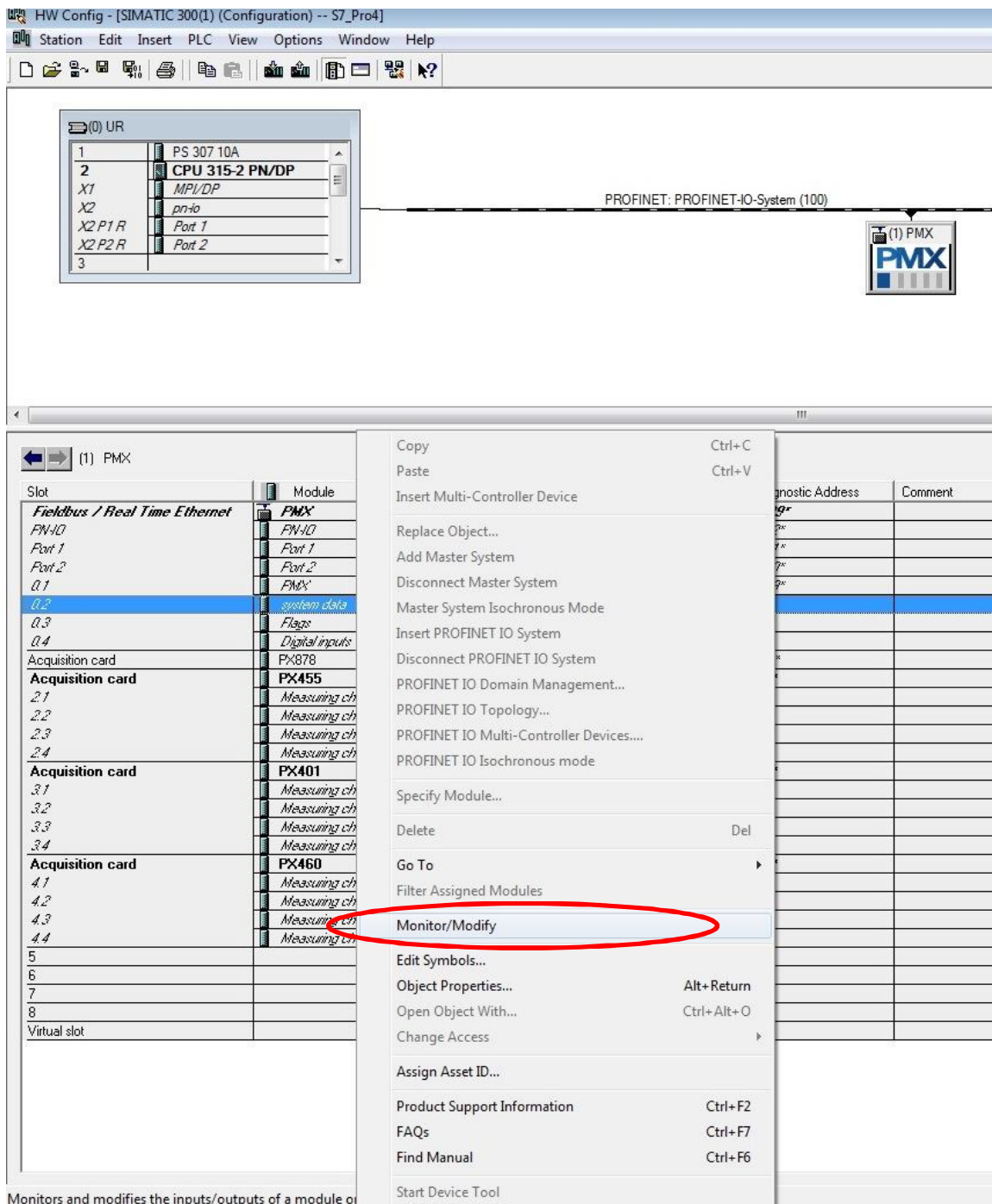
Hardware configuration

Note: In-depth instructions about device integration and connection are not included in this document.

Double-click "Hardware" to open the "Hardware config".

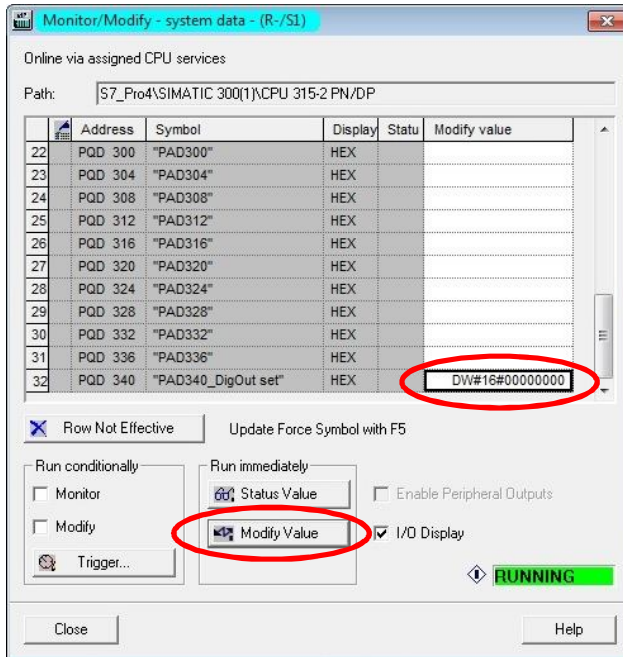


In the HW Config right-click "system data" then go to "Monitor/Modify".

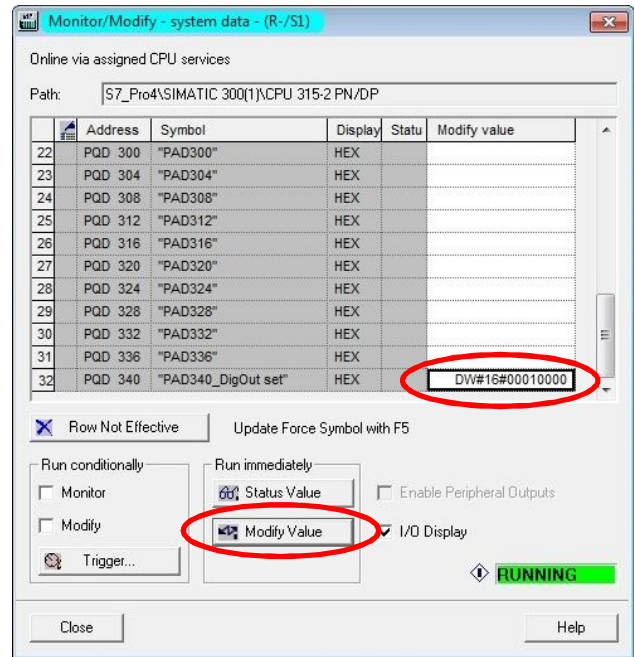


Set a trigger

A trigger can be set on the Address "PAD 340". To set the bit with the significance 16 for the chosen digital input of the PMX, the following mask has to be applied: "DW#16#00010000". Confirm your settings by clicking "Modify Value".



Trigger Off: DW#16#00000000



Trigger On: DW#16#00010000

Disclaimer

These examples are for illustrative purposes only. They cannot be used as the basis for any warranty or liability claims.