

TECH NOTE #001:: Very slow sample rates in catman

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 Status: public

Abstract

The TechNote describes how to handle very slow sample rates in catman (<1Hz). This is necessary e.g. in monitoring applications.

Workflow

This example is done with a QuantumX module.

1. Choose a sample rate of 10Hz for all channels in default sample rate group



Channel name	Sample	Sample rate/Filter	Sensor/Function
MX840A TM			
Time 1 - default sample rate			Time from sample rate
U9B 200N	4,061 N	10 Hz / BE 2 Hz (Auto)	U9B (SG full bridge)
WI +/-5mm	-2,462 mm	10 Hz / BE 2 Hz (Auto)	WI (Inductive half bridge)

2. Enable event/limit monitoring in program functions if not already done



Options: System->Program functions

System

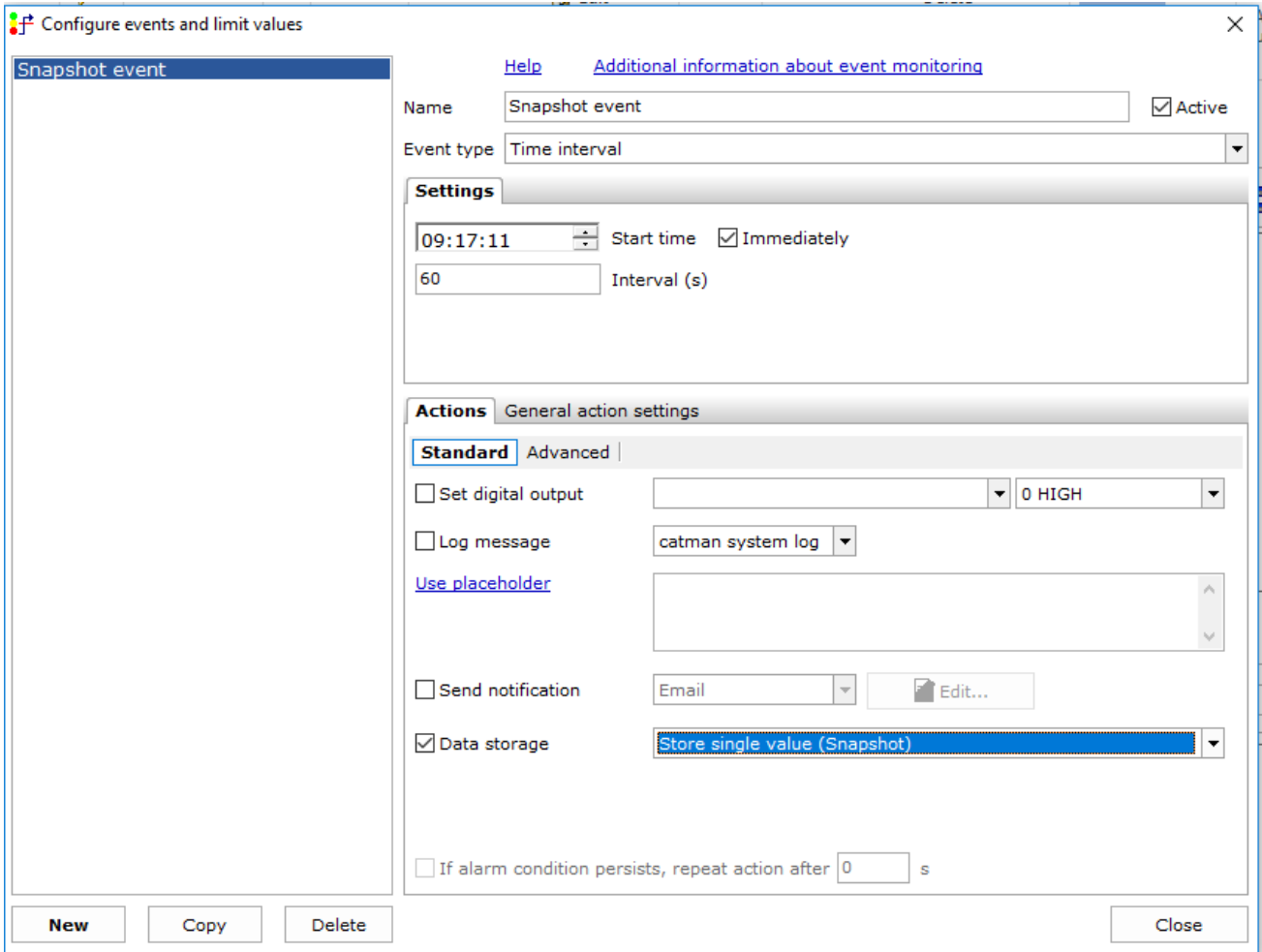
- Program functions
- Safety
- Data storage
- Folders
- Program start
- Shortcuts
- CX22

Using these options you may enable or disable advanced functions.

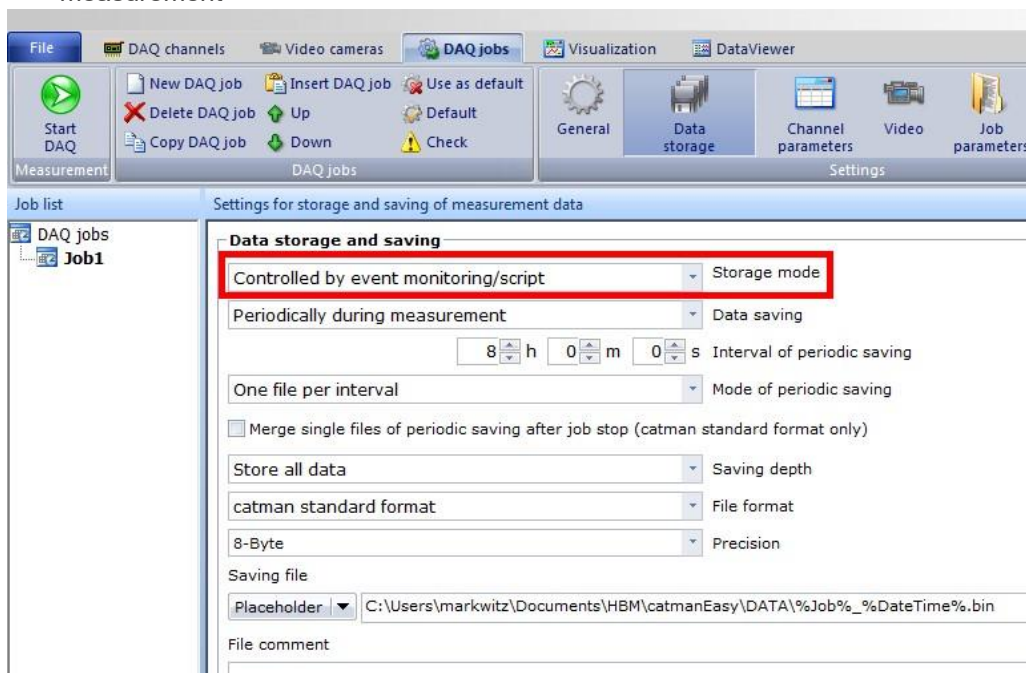
Base modules (always available)

- Online computations
- Limit value/event monitoring
- Edit sensor database
- Allow editing of saved data in DataViewer.
- Channel check
- Data overview (DataView) in DAQ mode as well
- Diagnostic functions (command terminal, communication logging)

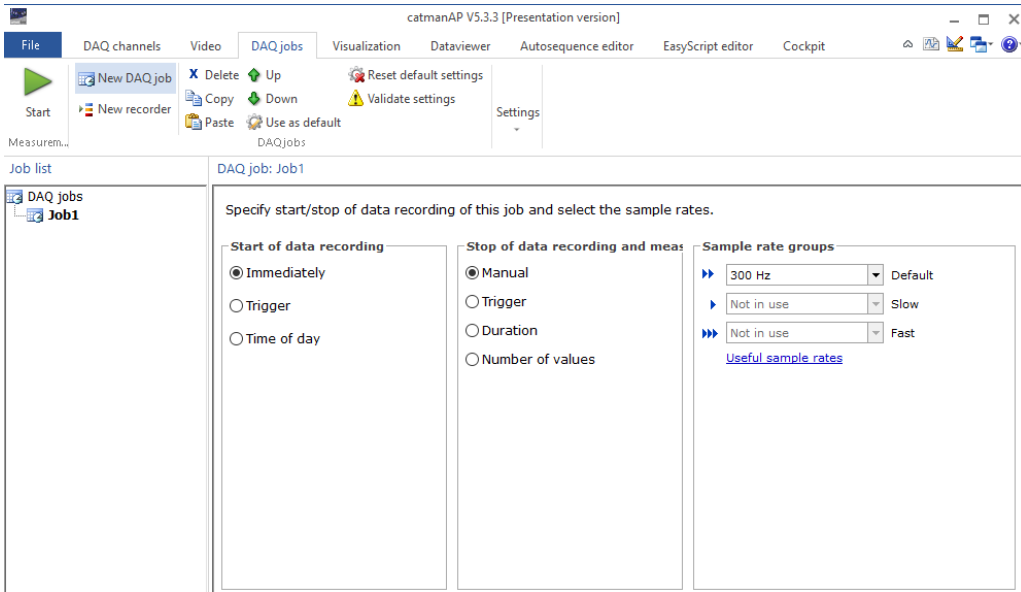
3. Create a new time interval event with a snapshot action and define storage interval



- In the data storage settings please choose storage mode “Controlled by event monitoring/script”. For long term measurements it is useful to also select “Data saving – Periodically during measurement”

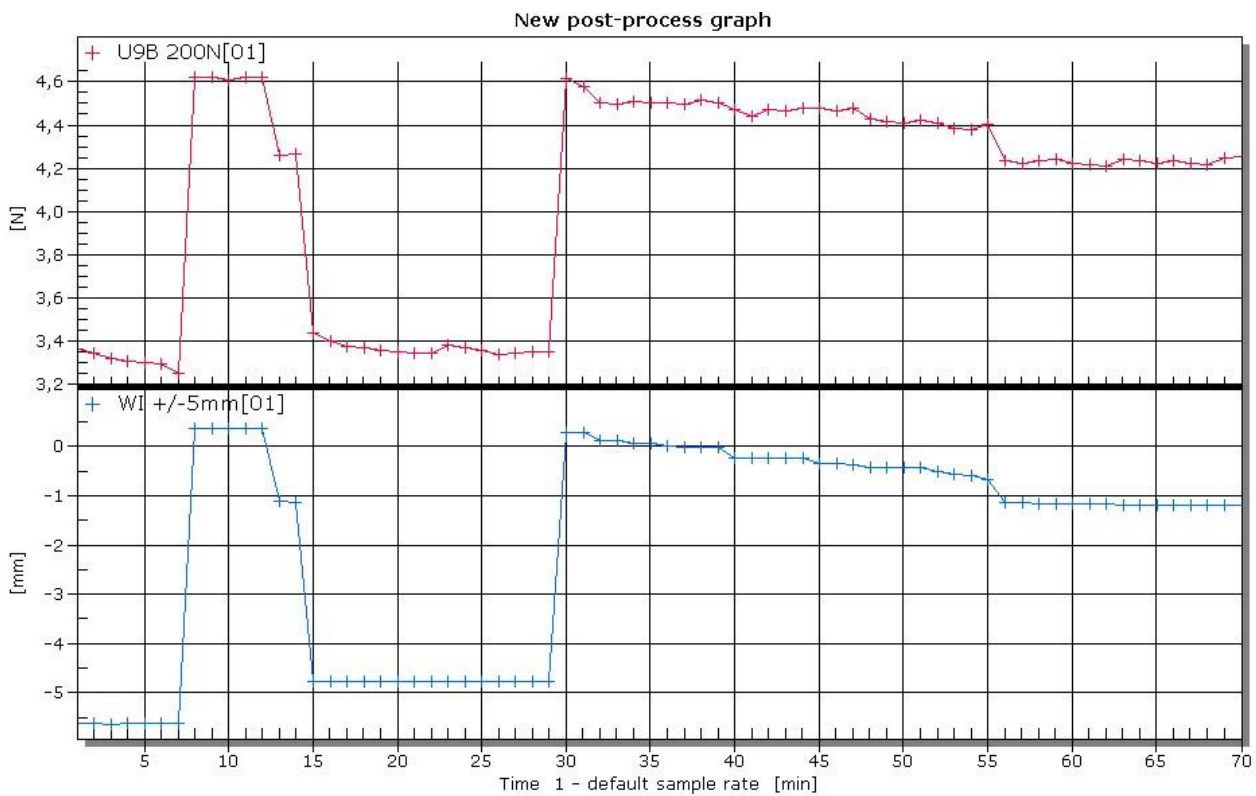


- Leave the default settings in the DAQ job settings



6. Start DAQ

7. After DAQ stop, switch to Analysis mode and visualize the date in a post process graph. For a correct display of the x-axis you have to drag and drop the default sample rate on to the x axis.



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