

TECH NOTE :: QuantumX / SomatXR Integration into CANape

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Status: public

Abstract

This Tech Note describes how to integrate QuantumX / SomatXR into CANape set up as XCP master via standardized xCP-on-Ethernet.

System Setup Preparation

You will need:

- latest version of the free HBM Software MX Assistant software
- CANape software from Vector
- QuantumX / SomatXR MX modules and CX27C (-R) gateway module supporting XCP-on-Ethernet

Hint: As we constantly improve, please always keep your embedded and PC software up to date.

This demo shows the QuantumX Universal Amplifier MX440B with a force and a displacement sensor connected. Connect all MX modules via KAB272 to CX27C and then connect your PC to CX27C by Ethernet cable.

MX Assistant (HBM)
CANape (Vector)

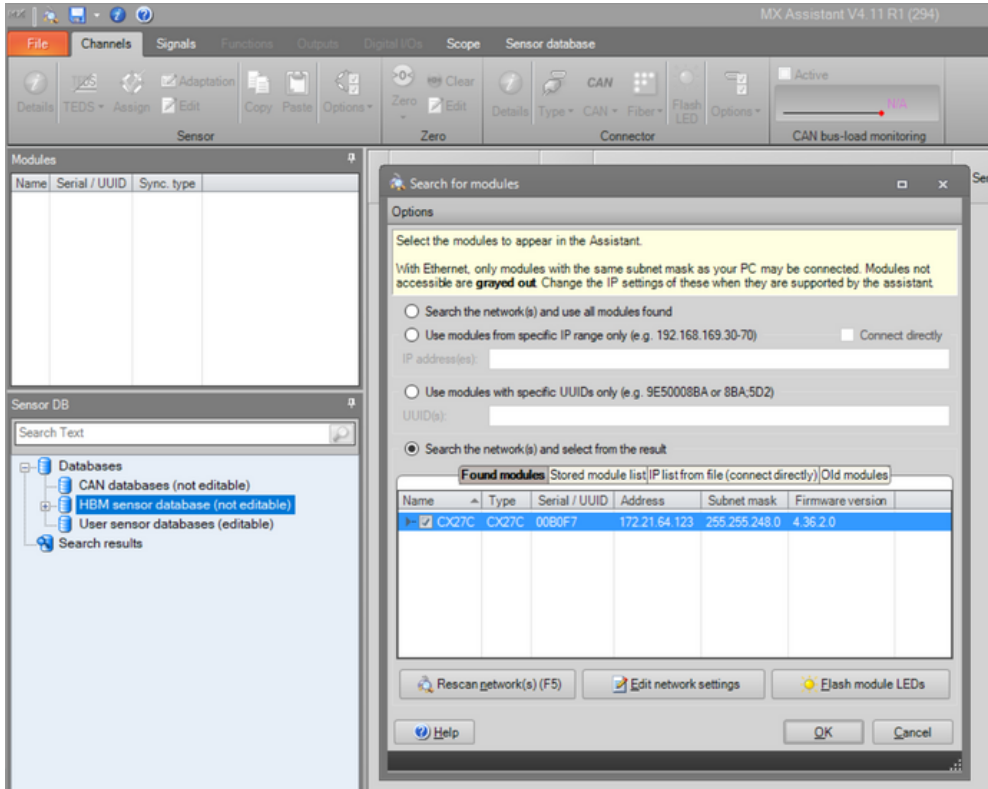
(HBM)
:or)



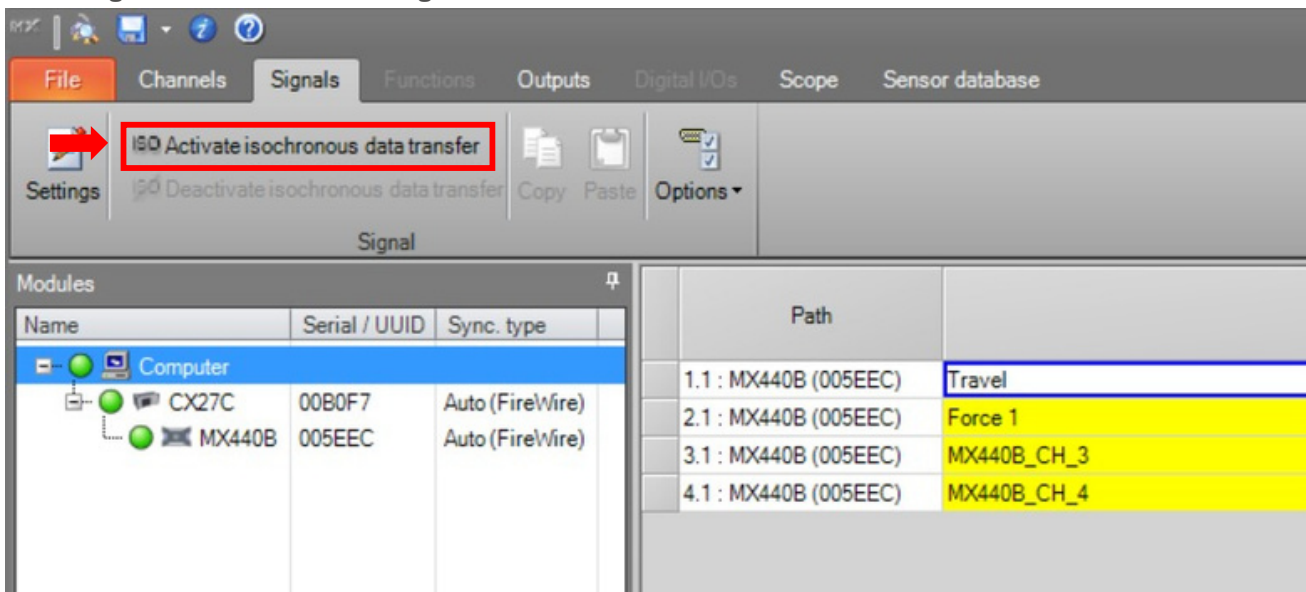
Workflow

MX Assistant Setup

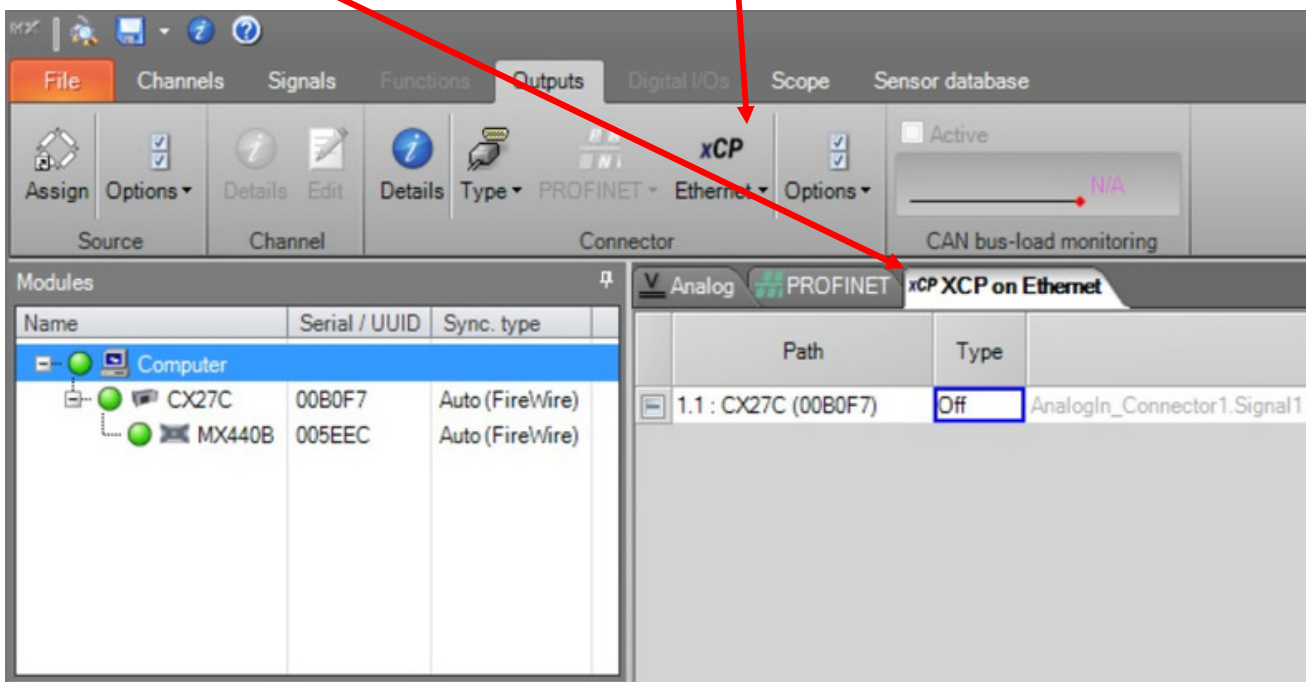
Start MX Assistant and search the network for available modules (press F4).
 Select CX27C and confirm with 'OK'.



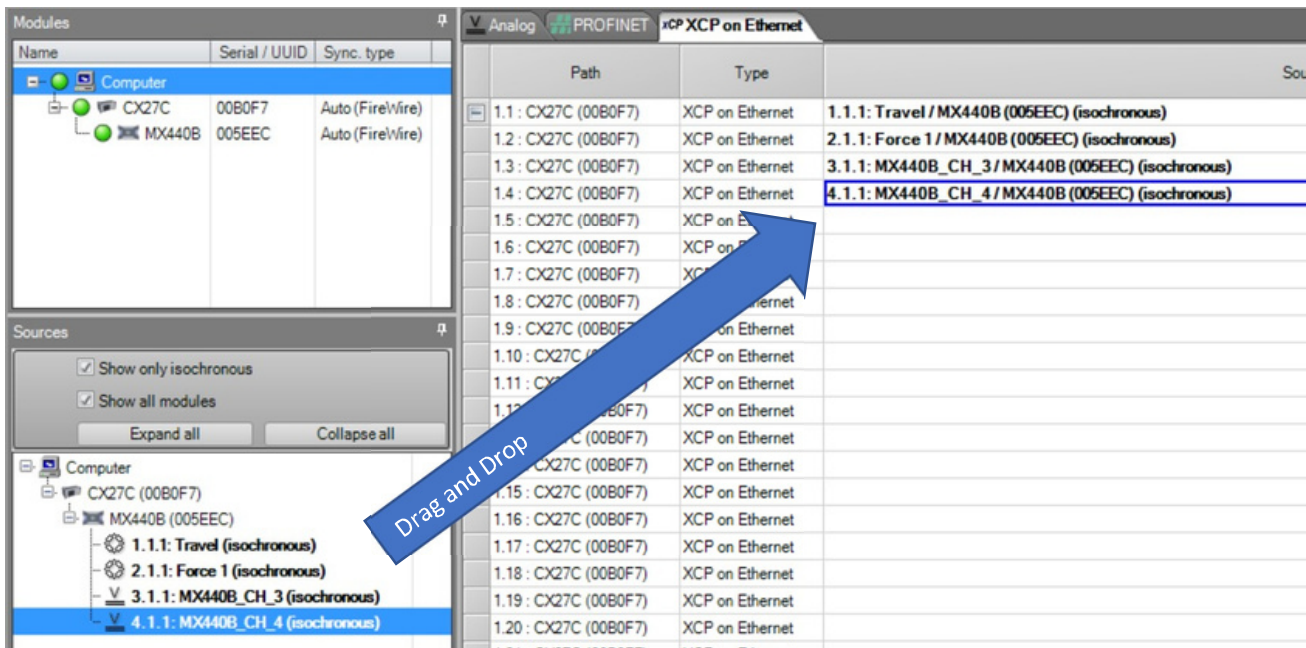
Go to "Signals" tab and select all signals and activate isochronous data transfer.



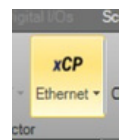
Go to Outputs (1) and XCP on Ethernet (2) tab and activate XCP on Ethernet (3).



Drag-and-drop the available signal sources to the XCP-on-Ethernet signal collector.



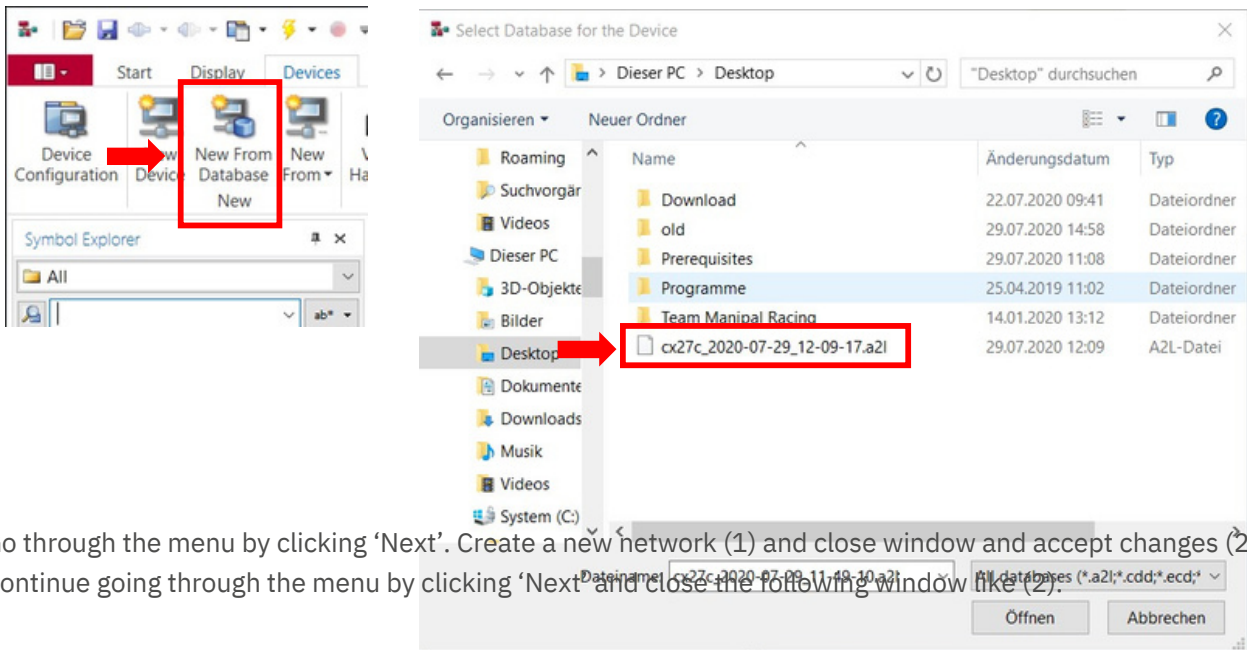
Export your setup to an ASAM MCD-2 MC / short A2L database file in the xCP Ethernet drop-down menu and save it.



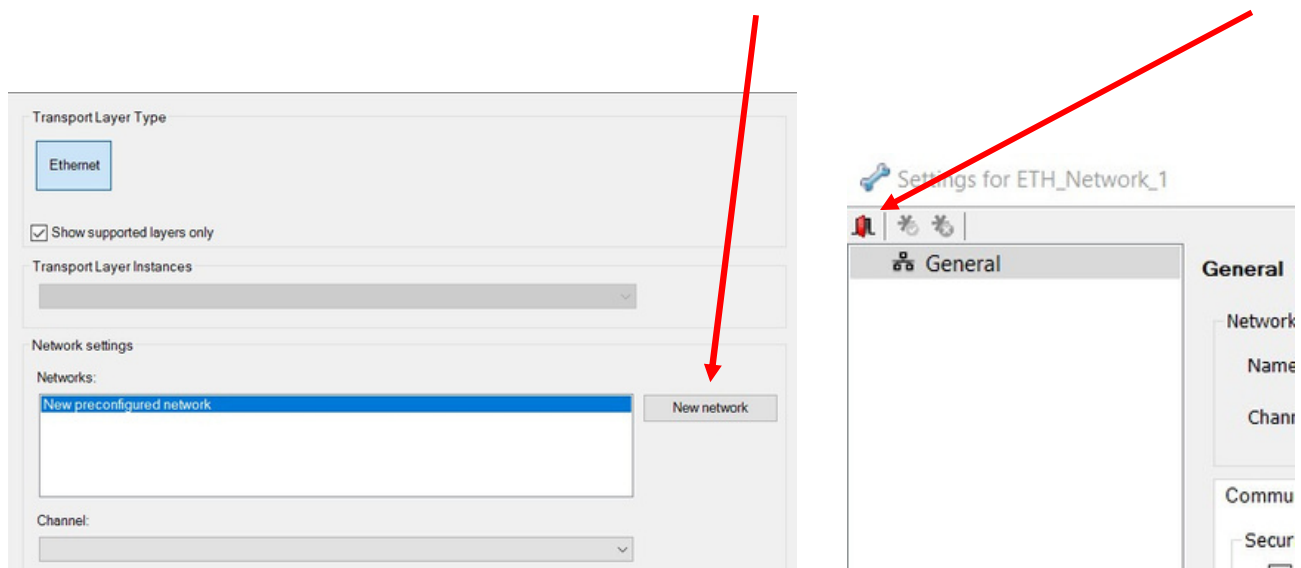
CANape Setup

Start CANape and create a new measurement project.

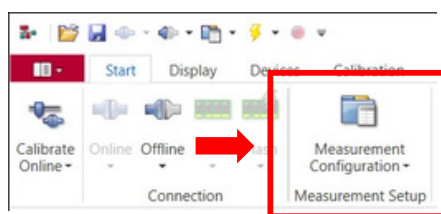
To integrate the QuantumX modules, go to 'Devices' choose 'New From Database' and select your A2L file.



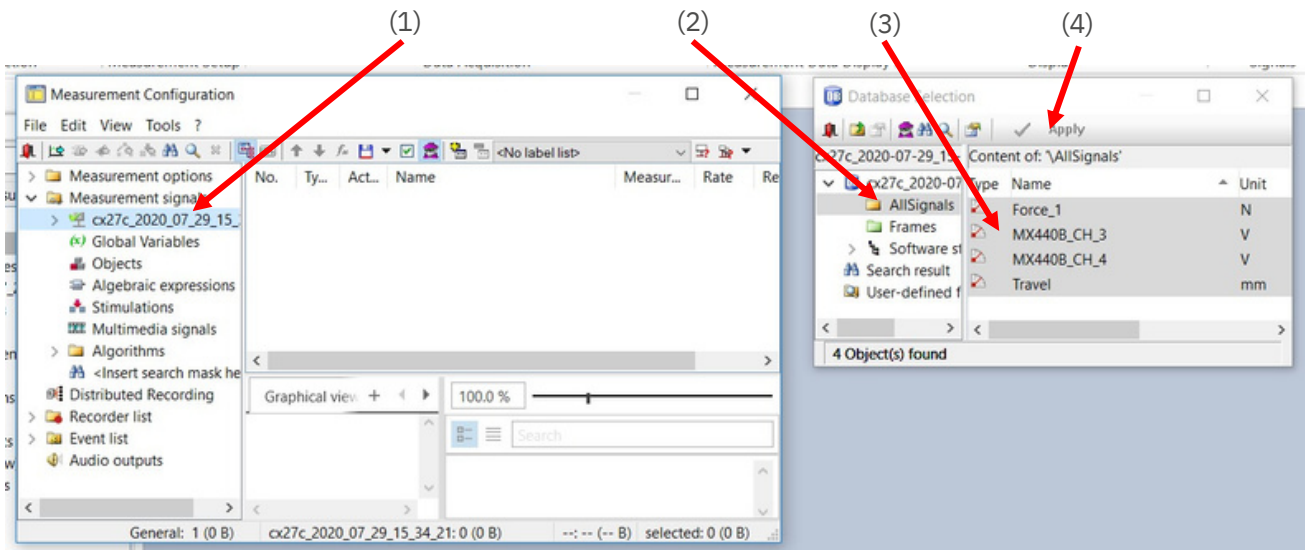
Go through the menu by clicking 'Next'. Create a new network (1) and close window and accept changes (2). Continue going through the menu by clicking 'Next' and close the following window like (2).



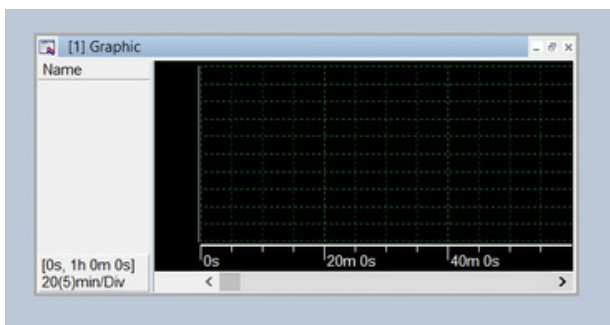
Then go to 'Start' and select 'Signals' in the drop-down menu 'Measurement Configuration'.



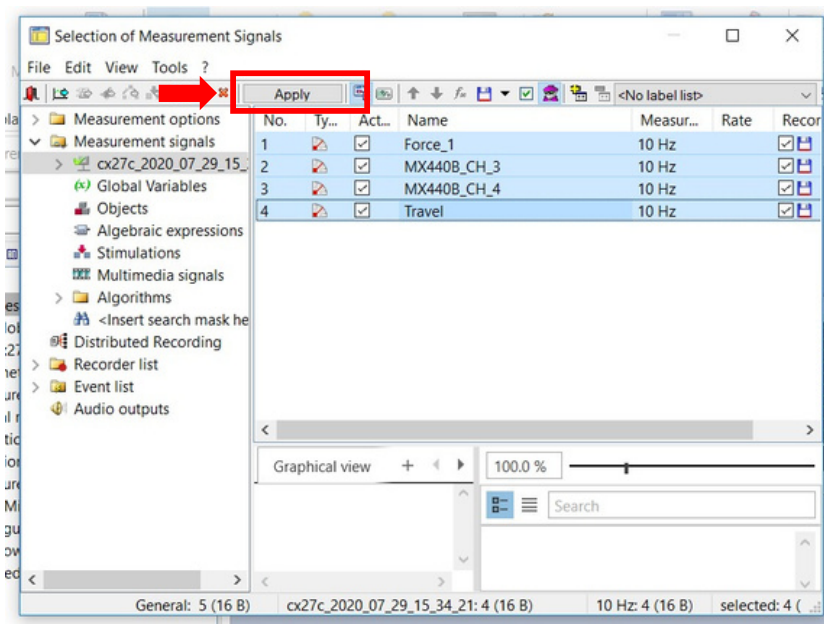
In the Measurement Configuration double click your a2l.-file (1), click 'AllSignals' (2), select the signals you need (3) and click 'Apply' (4).



Now go to 'Display', right click in the page (display window), select 'Measurement windows' and 'Graphic window', to create a measurement window, as shown below.



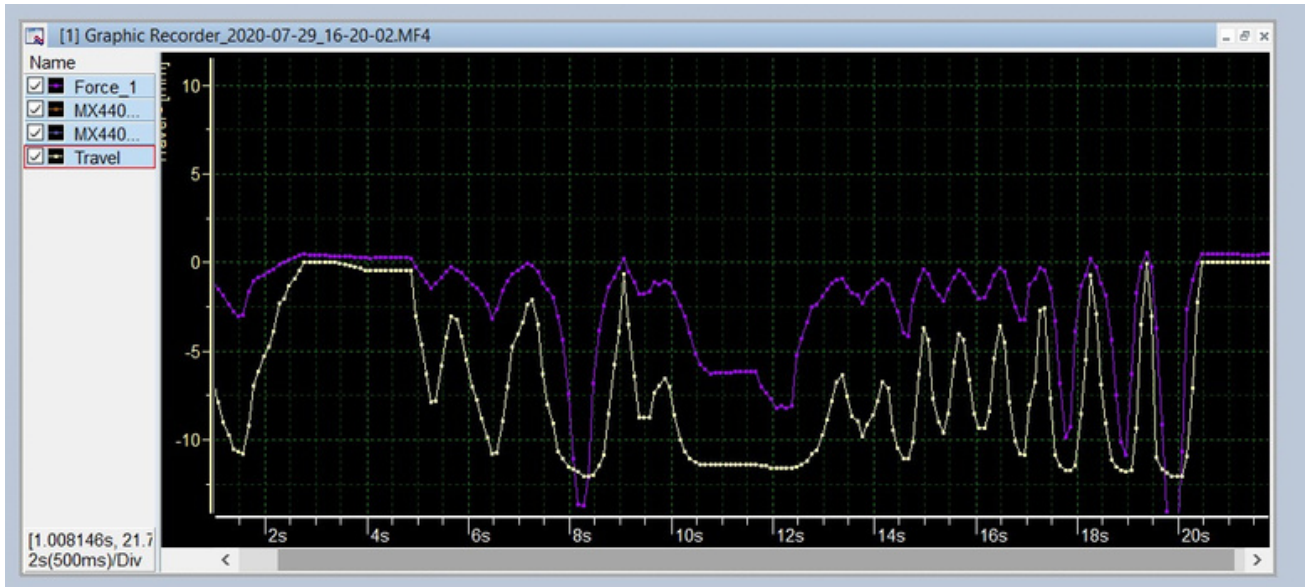
Then press 'F8', to insert a measurement signal. Select you signals and click 'Apply' and close the window.



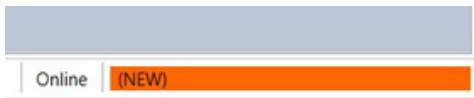
Measurement



Now you can start a measurement by pressing ‘Start’. It might be useful to scale the Y axis by scrolling on it, in order to display your signal properly.



Hint : To start your measurement you need enough internal memory. Therefore, the page name at the bottom on the right needs to be clear. Closing other programs will help. If it looks like the picture below, it won't work.



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