# MotoHawk:Calibration with INCA

From MotoTron Wiki

This page describes how to achieve access to a MotoHawk ECM using ETAS INCA, the calibration tool.

To configure the MotoHawk application for operation with INCA, refer to CAN Calibration Protocol

Procedure

1. Start with a clean database in INCA. To do this, in INCA, select Database → New and enter a database name in the "New database" dialog:
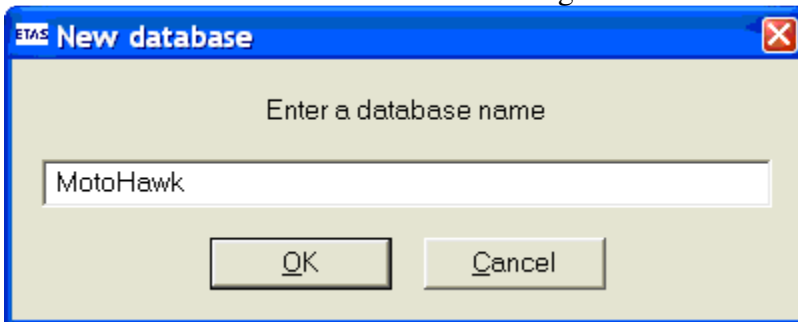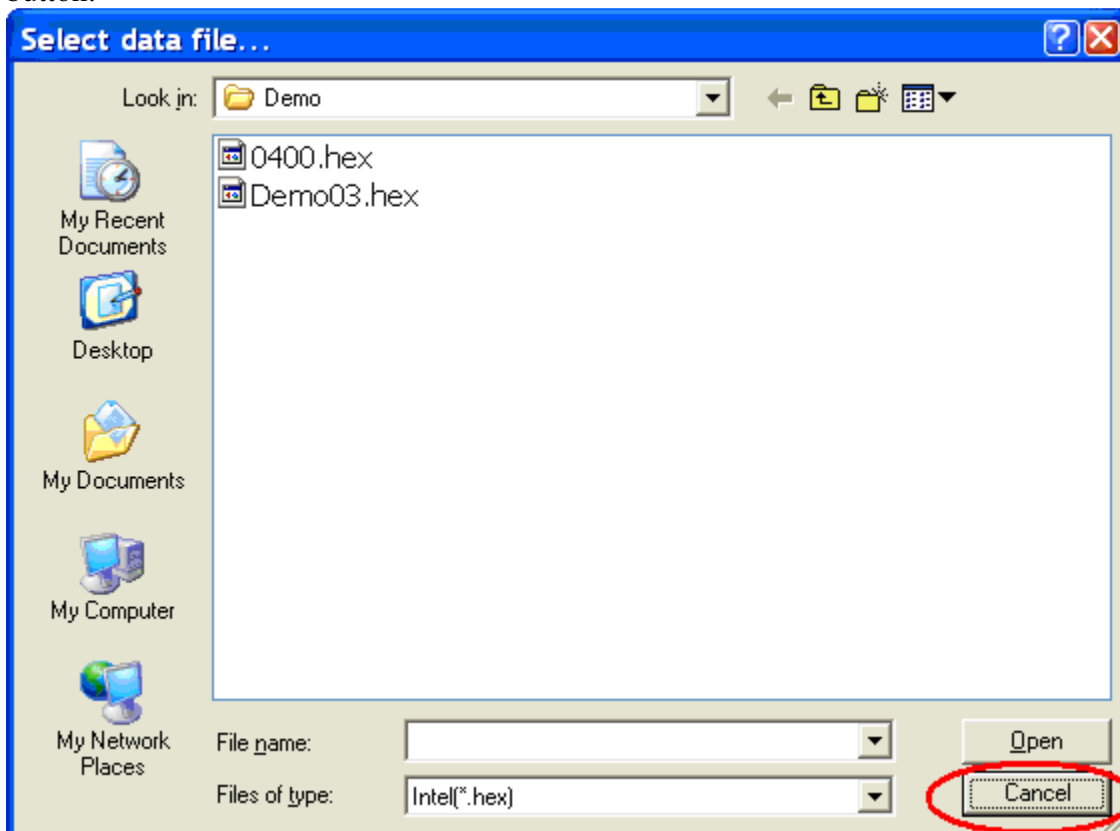

2. Add a workspace. To do this, select Edit → Add → Workspace and accept the default name. The Items tree should now look like this:


3. Add the ASAP2 file which was generated during the MotoHawk build of your Simulink project by selecting Edit → Add → ECU Project (A2L).
4. Browse to the ASAP2 file, in this case CCP_Test_022.a2l located in the TDB subdirectory of the build directory:
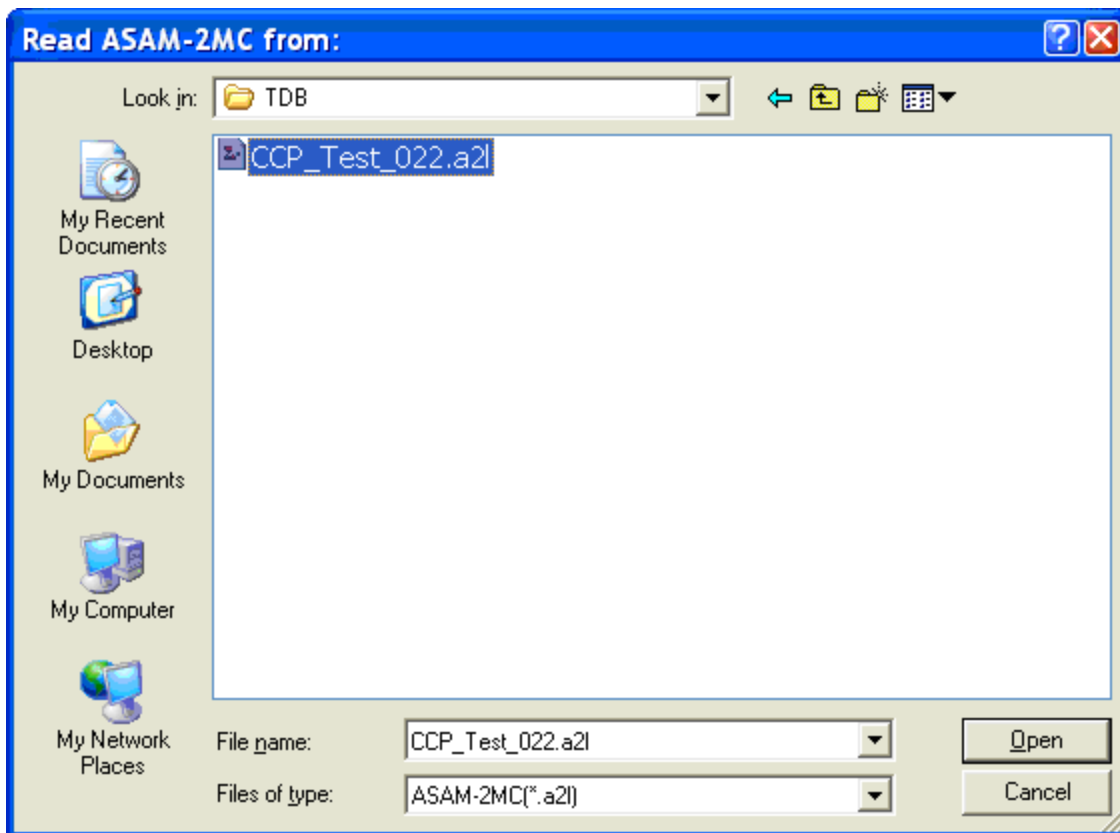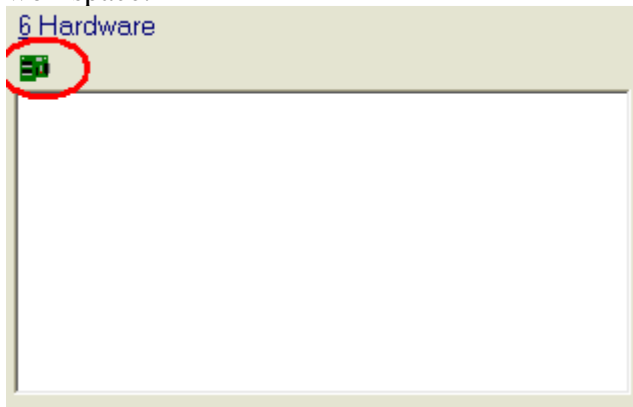
5. When the "Select data file" dialog is requesting the controller .hex file, just click on the **Cancel** button:
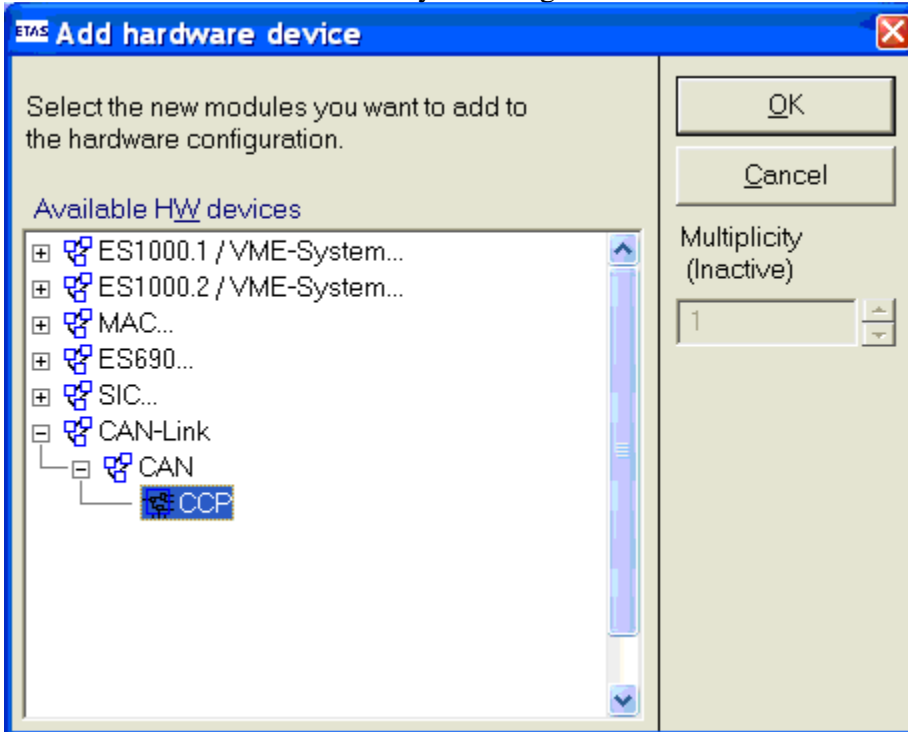
6. Add an experiment to the Items tree by selecting Edit → Add → Experiment. The Items tree should now look like:
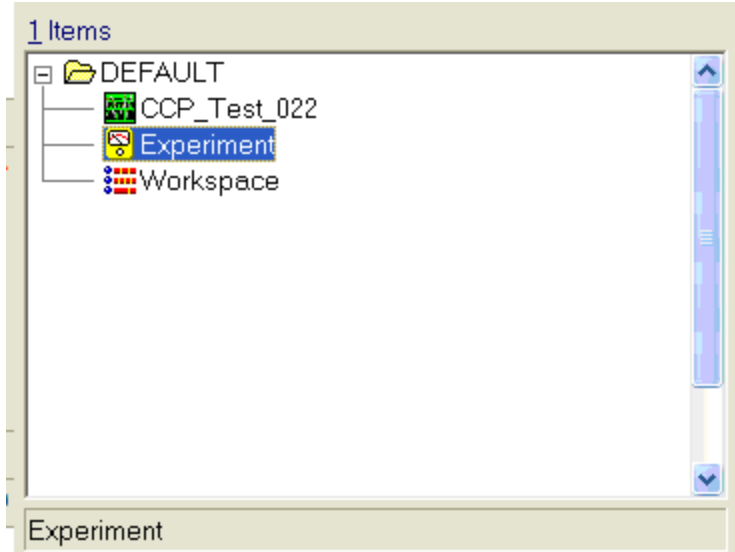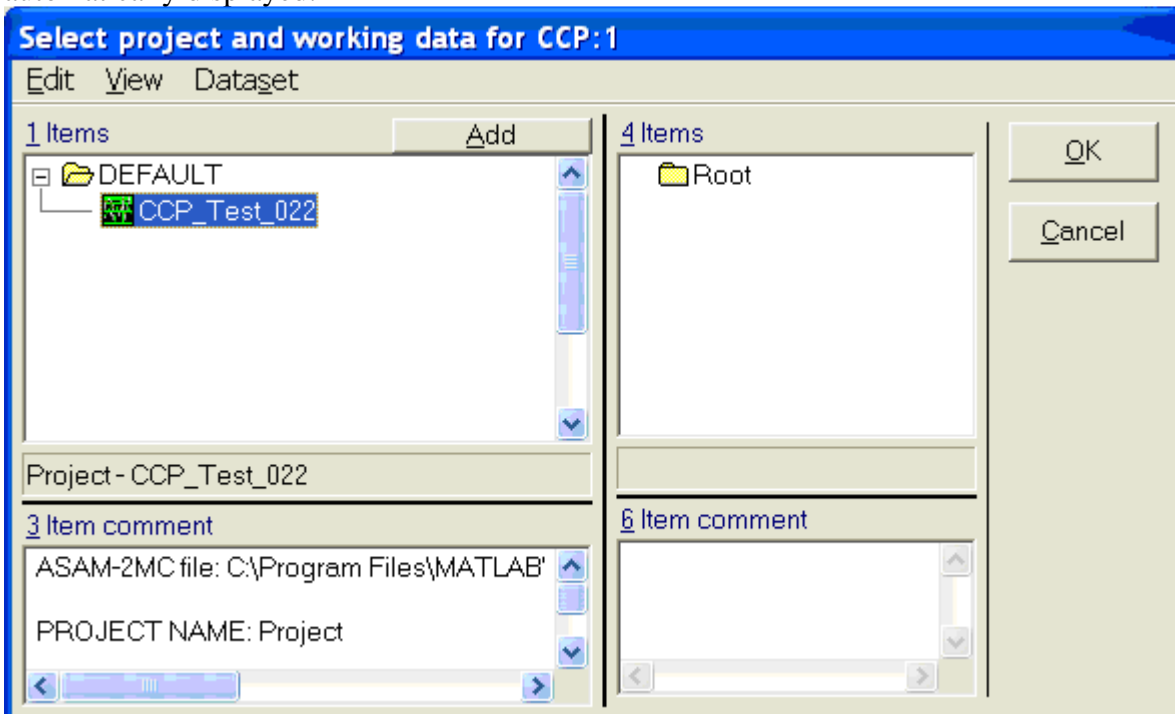

7. Configure the hardware. To do this, select the circuit board button in the Hardware portion of the workspace:
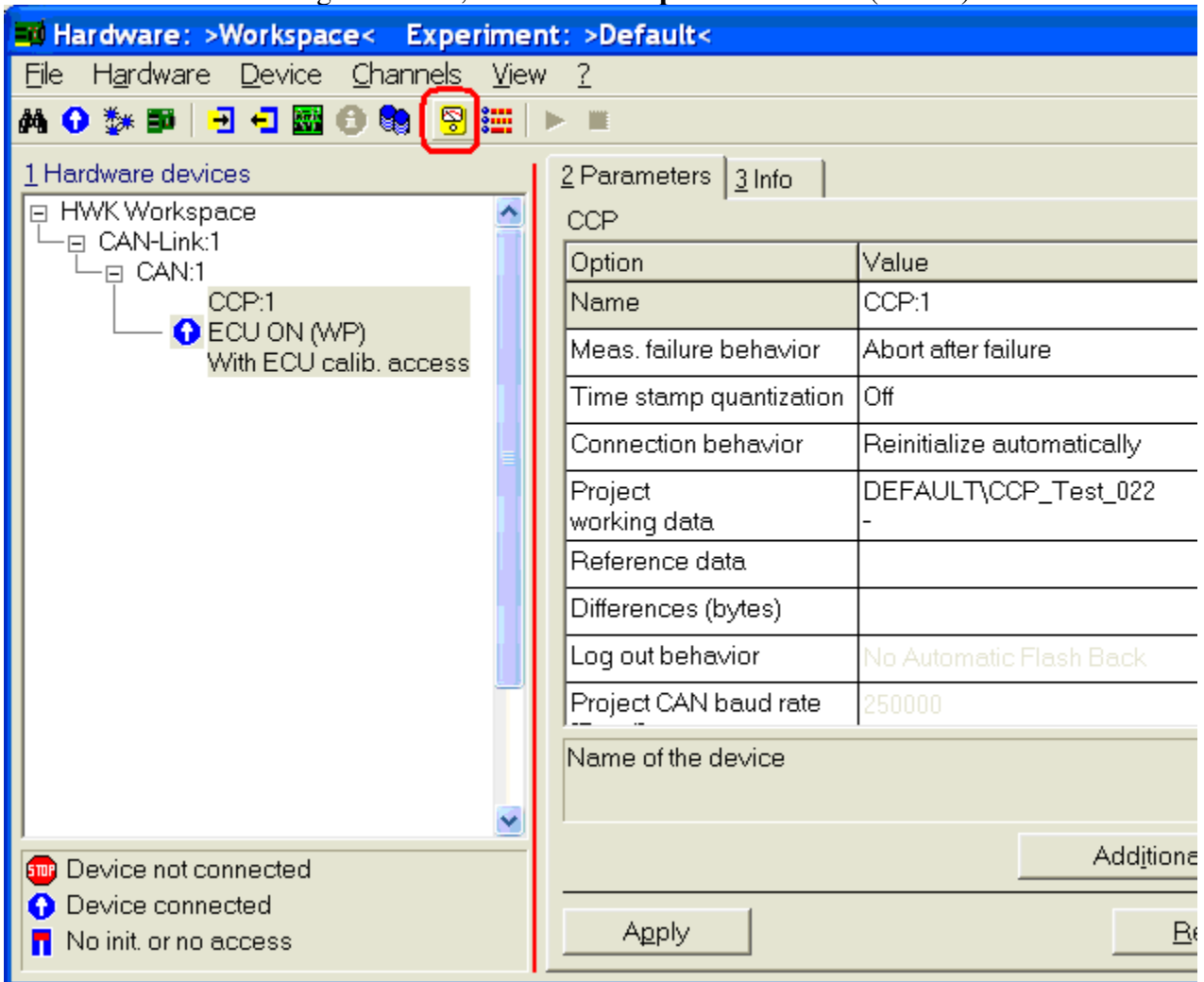
8. Add a CAN-Link CCP Device by selecting Device → Insert in the hardware manager:

Add hardware device

Select the new modules you want to add to the hardware configuration.

Available HW devices

- ⊞ ES1000.1 / VME-System...
- ⊞ ES1000.2 / VME-System...
- ⊞ MAC...
- ⊞ ES690...
- ⊞ SIC...
- ⊟ CAN-Link
  - ⊟ CAN
    - CCP

OK
Cancel

Multiplicity (Inactive)

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9. Select the only possible project when the "Select project and working data for CCP:1" dialog is automatically displayed:

Select project and working data for CCP:1

Edit   View   Dataset

1 Items   Add
⊟ DEFAULT
  └ CCP_Test_022

4 Items
  Root

OK
Cancel

Project - CCP_Test_022

3 Item comment

ASAM-2MC file: C:\Program Files\MATLAB'

PROJECT NAME: Project

6 Item comment

10. From the Hardware Manager window, click on the **Experiment** button (circled):


11. You may receive an error message stating "Calibration not possible.." as below, but this is because INCA needs an opportunity to upload the calibrations:
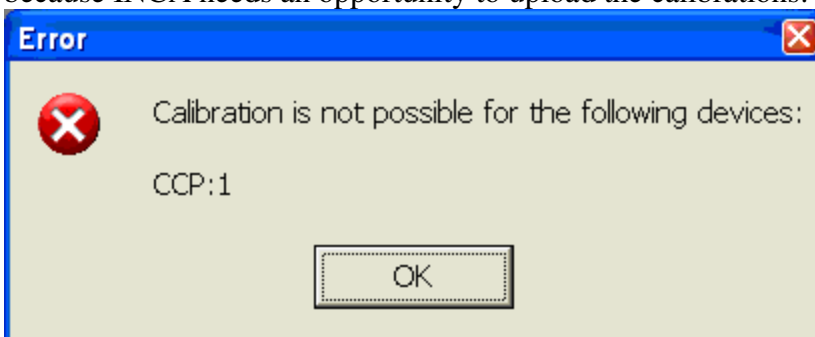

12. On the Manage Memory Pages dialog, which should have been automatically displayed, click on the **2 Enhanced** tab, and click on the **Do it** button. This will upload the calibration from the controller:
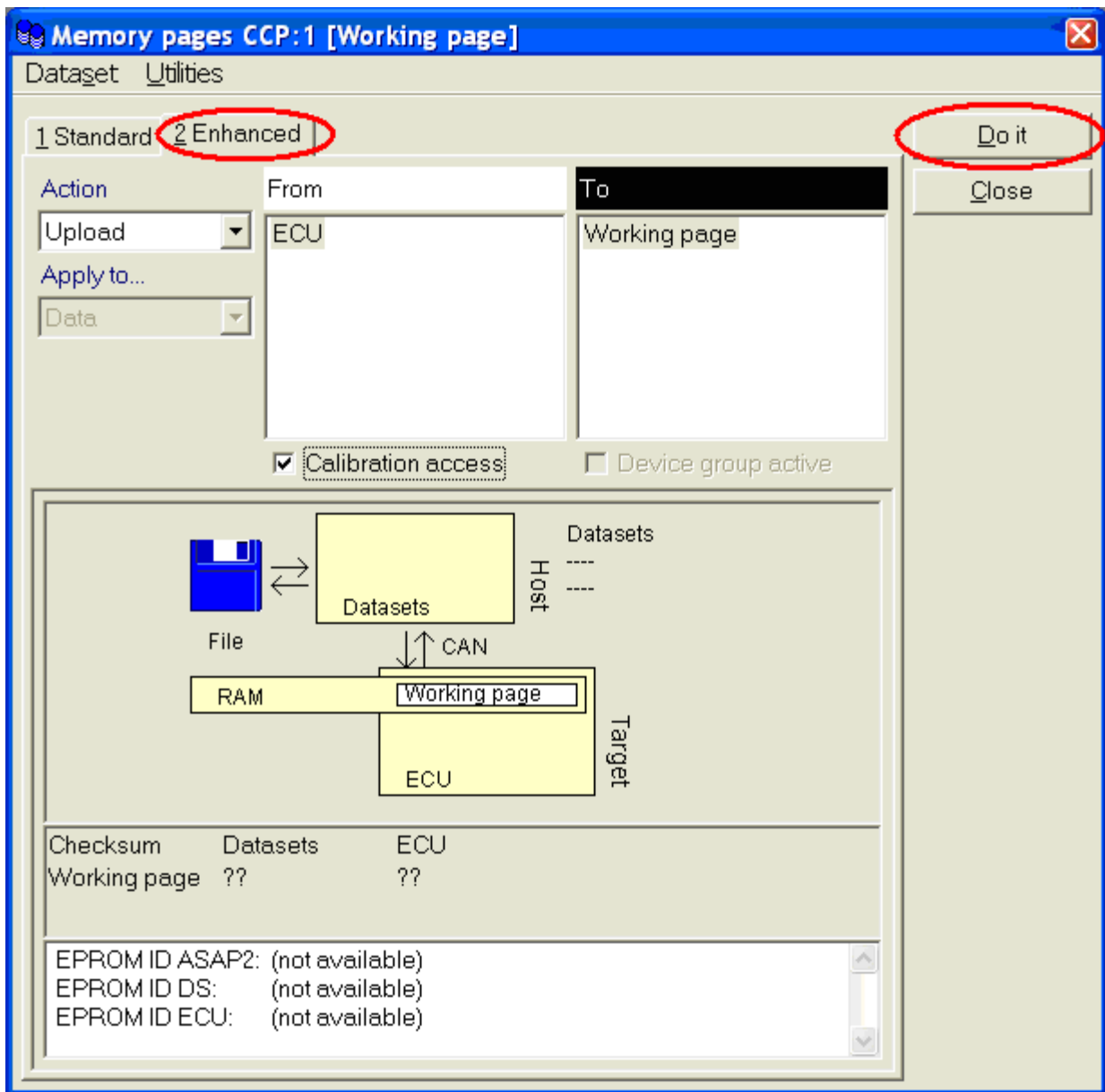
13. INCA uploads the calibration:
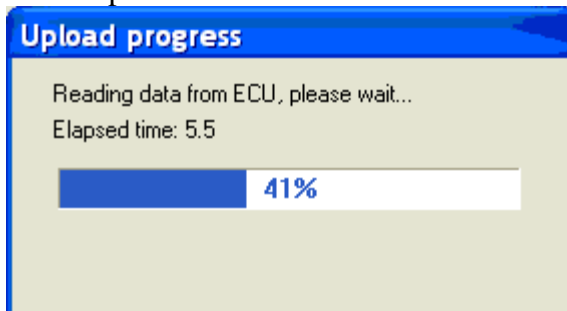
14. Close the Manage Memory Pages dialog. The Experiment window is now ready to be configured to start data acquisition, or make calibration changes. In the image below, the MotoHawkModelSecondsInUse is shown configured to be displayed as a measurement; the calibration PsuedoRPM was changed to 1000:
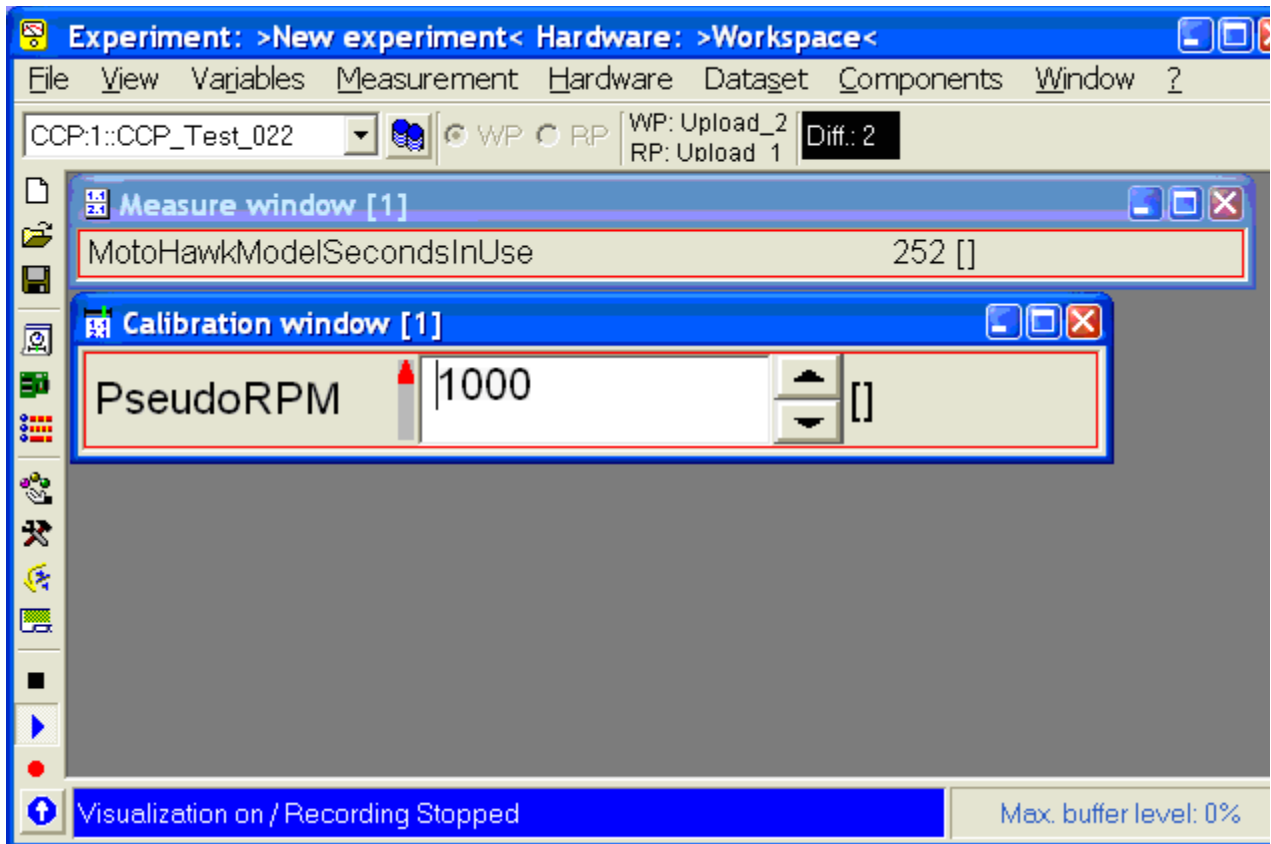
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title=MotoHawk:Calibration_with_INCA"

- This page was last modified 18:40, 21 April 2010.