ETAS
DRIVING EMBEDDED EXCELLENCE

Question:

How can I display and record the PC system time / date in INCA?

Answer:

Import the formula for measuring the PC system time and select the resulting calculated Signal

Copy the data shown below into an editor and save it as file format .xcs
This will calculate the system time – the calculation can be seen in the area marked in yellow

```xml
<?xml version="1.0" encoding="ISO-8859-1"?>
<CONFIGLIST>
<VERSION>6.1</VERSION>
<CONFIG>
<NAME>System_Time</NAME>
<DATATYPE>double</DATATYPE>
<BITSIZE>64</BITSIZE>
<CALCULATIONRULE>${'~~measureTime~~'} - ${'~~measureTime~~'} +
TIME/10000</CALCULATIONRULE>
<DESCRIPTION>This calculates the system time of the PC</DESCRIPTION>
<RATE>100</RATE>
<MEASUREDSIGNALLIST>
<SIGNAL>
<NAME>~~measureTime~~</NAME>
<DATATYPE>double</DATATYPE>
<BITSIZE>32</BITSIZE>
<RATE>100</RATE>
</SIGNAL>
</MEASUREDSIGNALLIST>
</CONFIG>
</CONFIGLIST>
```

If "System Date" is to be displayed replace the yellow marked area as follows:

```xml
<CALCULATIONRULE>${'~~measureTime~~'} - ${'~~measureTime~~'} + DATE
</CALCULATIONRULE>
```

Import this file in INCA Experiment Environment:

```
Variables → Define/Manage Calculated Signals... → Import
```

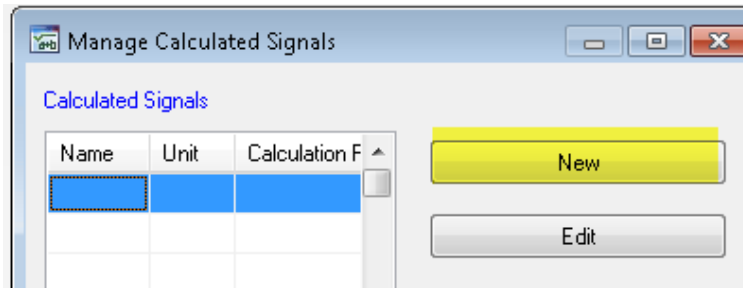Select the new variable "System_Time" from the Source "CalcDev"

<u>If required</u>: Adapt the numbers of decimals in the context menu "Properties"

Additional information:

Read here the step-by-step instructions how to create the calculated signal "System time" in INCA:

Open "Define/Manage Calculate Signals..." from the "Variables" menu and press the button "New":

1. In "Define Calculated Signals", select "Standard"
2. Enter the name of calculated signal → "System_Time"
3. Data type → double
4. Optional: Add a short description outlining the functionality of the calculated signal
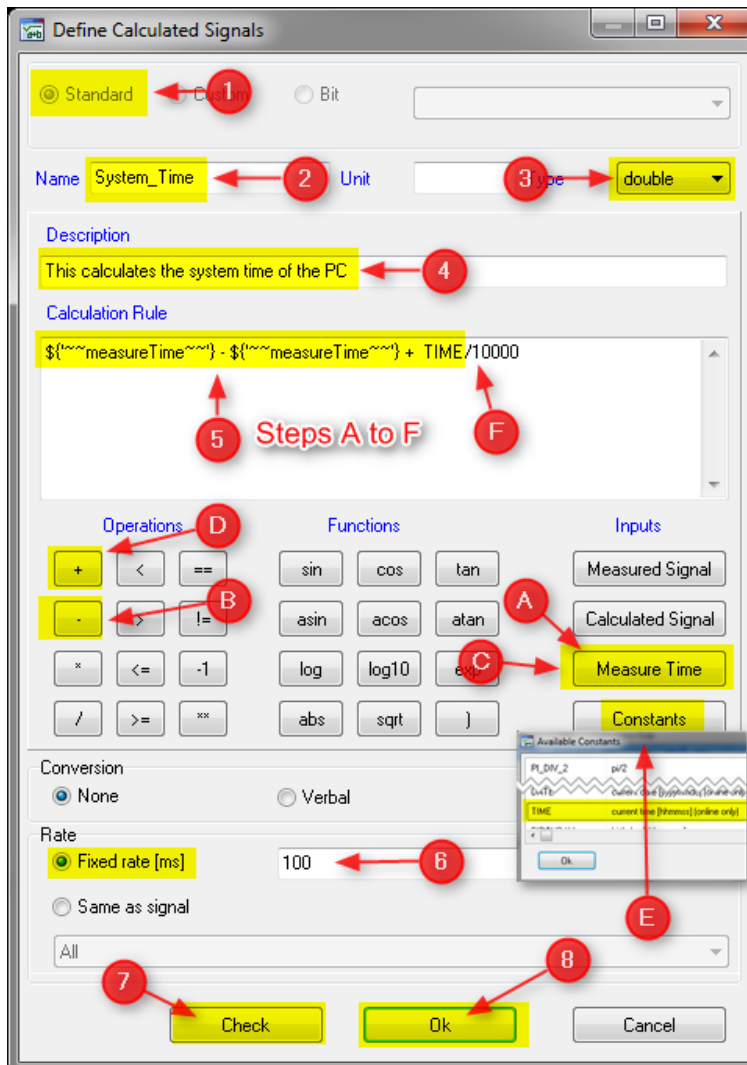
5. In order to insert the formula in the field "Calculation Rule" proceed as follows:

    A) Press the button "Measure Time" under the area marked "Inputs"
    B) Press the button "-" from "Operations"
    C) Press the button "Measure Time" under the area marked "Inputs" again
    D) Press the button "+" from "Operations"
    E) Press the button "Constants" and select "TIME"
       (for date select "Date" and ignore step F)
    F) Finally add the term "/10000" the formula in the field "Calculation Rule"

6. Select "Fixed rate (ms)": fill in "100"
7. Press "Check" to verify the formula is plausible
8. Press "OK"

In the experiment environment, select the new calculated signal "System_Time" and start a measurement.

Verify whether the system time is correctly displayed.

If required: Adapt the numbers of decimals in the context menu "Properties"
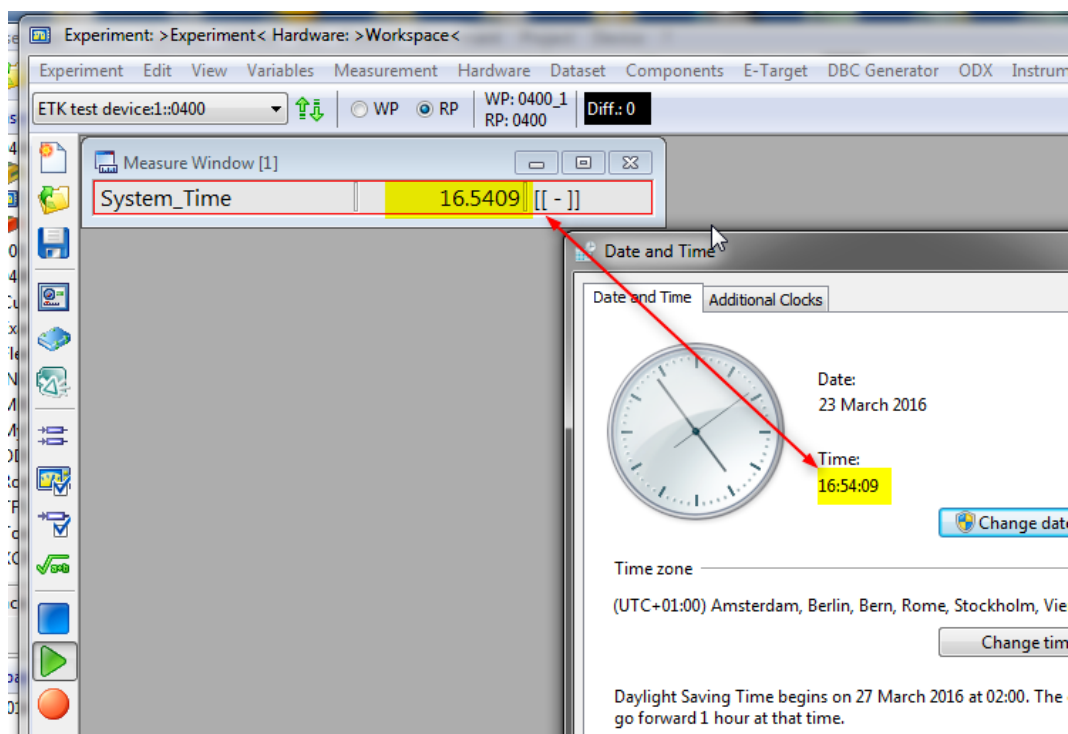
In case of further questions:

Please feel free to contact our Support Center, if you have further questions.
Here you can find all information: http://www.etas.com/en/hotlines.php