VECTOR

How to Use a Histogram Function in CANape
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Support Note SN-IMC-1-038

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Restrictions Public Document

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1 Description

The example shows how to use histogram function from the CANape library.

2 Disclaimer

3 How to use

It is essential to start XCPsim to use the example project for online purposes. XCPSim is a simulated ECU and the example project can not be run if this simulated ECU was not started. Therefore, please start XCPsim by double-clicking `XCPsim.exe` within the example folder at first.

Basically a histogram is an approximate representation of the distribution of numerical data.

Within this example project the array used for histogram representation consists of 21 elements. This amount of elements was chosen since the value range of the signal “channel1” of -10 to +10 (including 0) is of interest. However, it would be possible to use an array with more elements to visualize the data more detailled. The value range defined for the function itself is also -10 to 10. Therefore array elements 0-9 represent negative values, array element 10 represents value "0" (it’s colored blue in a bar window) and array elements 11-20 represent positive values.

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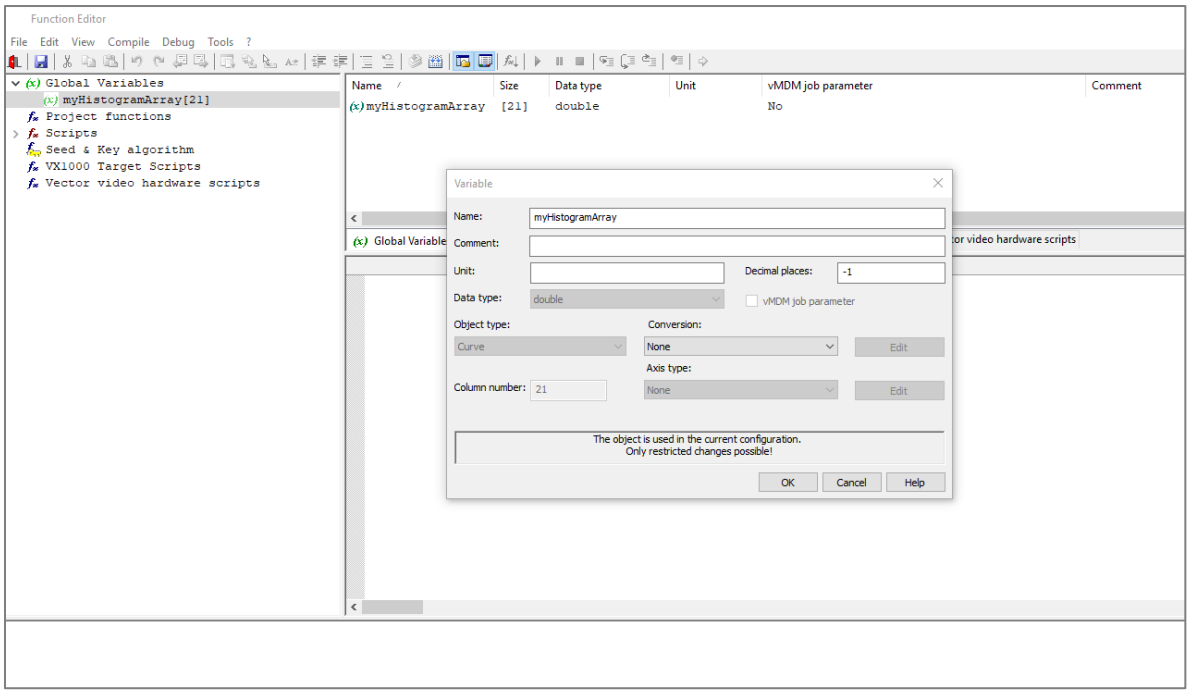

Figure 1 – Definition of global variable ‘myHistogramArray’

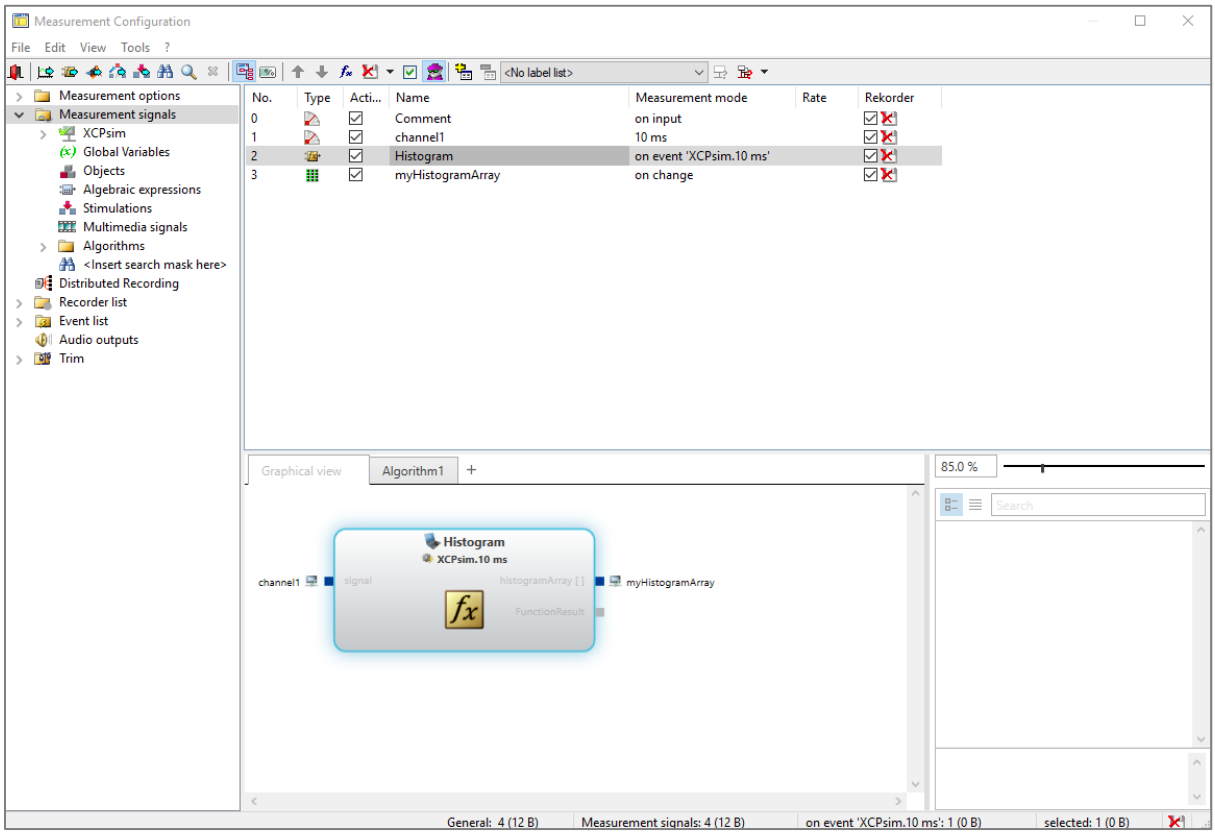

Figure 2 – Measurement Configuration

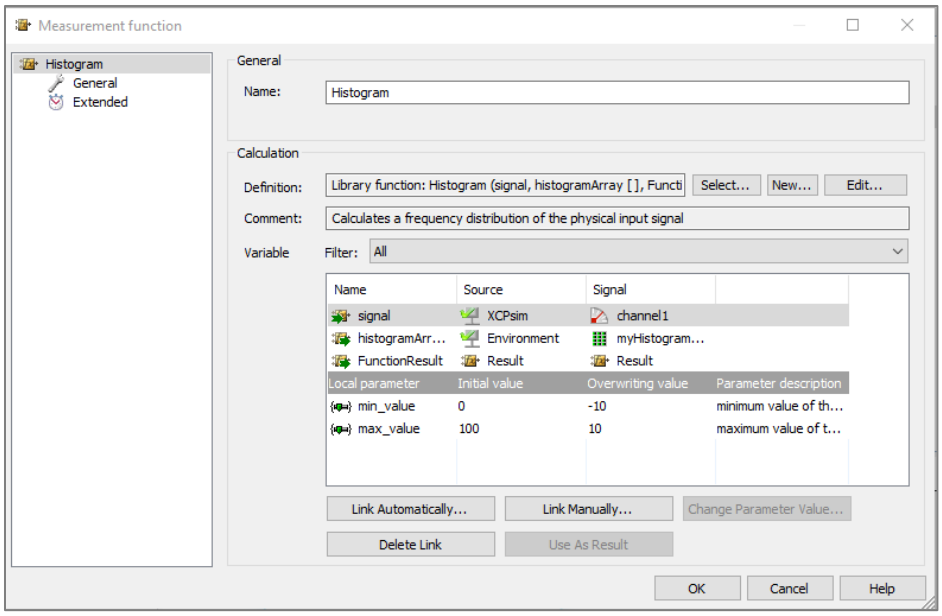

Figure 3 – Settings for Histogram function

4 Associated files

The source code and/or example project files can be found in the ZIP archive SN-IMC-1-038_How_to_Use_a_Histogram_Function_in_CANape.zip.

5 Contacts

For support related questions please address to the support contact for your country https://www.vector.com/int/en/company/contacts/support-contact/.