JetSym

Version Update from V. 5.4.1 to V. 5.5.0

We automate your success

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Version 1.00

12/18/2017

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1 New features

Below, all features that are new in this version, as well as the enhancements are listed.

1.1 Monitor

1.1.1 Enhanced task information in analogy with the "TaskGetInfo()" function

On the monitor, on the **Tasks** tab, enhanced task information can now be displayed by clicking a **+** symbol. In case the OS of a controller does not support this function yet, no **+** symbols will be displayed. The same information as supplied by the TaskGetInfo() function are displayed.

1.2 Hardware Manager

1.2.1 Various default values for timeout in controllers

Many controllers have got a default timeout which is higher than 2 s. If possible, do not fall below this value. If here you enter a value which is smaller than the default timeout value, JetSym will issue a notice.

1.2.2 Context menu for creating axis groups

In the Hardware Manager, the context menu for creating axis groups has been reviewed. Now, the group type - path group or technology group - is selected in the context menu directly.

1.2.3 New axis types MC-JM1005 and MC-JM1008

In Hardware Manager, two new axis types, MC-JM1005 and MC-JM1008, can now be selected for the EtherCAT bus.

1.2.4 New controller type

There is the new controller type JC-970MC.

1.3 JetSym

1.3.1 Restructuring the main menu

The menu items **Set active configuration...**, **Configurations...** and **Export declarations...** are now in the **Project** menu. Before restructuring, these menu items were in the **Build** menu.

1.3.2 Enhancing the feedback information

The information which is compiled when clicking the feedback button has been enhanced by the list of concurrently installed product versions.

1.3.3 Create new projects from templates and samples

New projects can now be created from templates or samples. You can create templates yourself from projects.

1.4 Configurations

1.4.1 Copying all parameter data

For creating configuration settings, there is the option to copy all parameter files as well.

1.5 Backup file

1.5.1 Display of variable names

When uploading an STX backup file, now, the variable name of the registers which are applied by the program, will be displayed.

1.6 Motion Setup

1.6.1 EtherCAT® axes have been enhanced by the parameter "Motor Design"

In Motion Setup for EtherCAT® axes of the type JM-1005, respectively JM-1008, the range of parameters for motor settings has been enhanced by the parameter **Motor Design**.

1.7 STX programming language

1.7.1 The usage of an int variable as a pointer towards registers is obsolete.

It is a better solution to use a pointer towards int-registers.
Sample: MyPointVar : pointer to int;
A warning is issued, if an int-variable is used as a pointer towards a register. Nevertheless, this variant still works. Yet, customers are advised to program these situations in another way.

1.7.2 New pragma WARN_ADDRESS

This pragma lets you issue a warning for each use of the &-operator.

1.7.3 Multiple inheritance of interfaces

In this case, an interface can be an heir of one or several basic interfaces.

1.8 Motion API

1.8.1 New function for resolving Gantry groups

The Motion API feature has been enhanced by a function for resolving Gantry groups. For this, a controller OS of an MC as of version 1.20.0.68 is required.

1.8.2 Counting and reading motion blocks of path groups

Motion API v. 1.x and v. 2.x of path groups have been enhanced to enable counting and reading of motion blocks. A controller OS for an MC software as of v. 1.20.0.72 is required.

2 Fixed software bugs

This chapter describes the software bugs which have been fixed in the new software release.

2.1 Oscilloscope

2.1.1 Error following a transfer of channel scaling

If, after transferring channel scaling the automatic scaling mode had been selected and then undone again, the values of before transferring the scaling were displayed again.

2.1.2 The context menu does not open

If one of the **Min/Gain/F** or **Max/Ofs/Y** cells was active in the channel table of the **Channels** tab was active (flashing cursor), the context menu in the cell would not open.

2.1.3 Disabled browse buttons

In device-compatible mode, the browse buttons on the **Trigger** tab had been partially disabled.

2.1.4 Faulty copy and paste of files

If a variable generated by the oscilloscope wizard was copied and pasted again, the project configuration path would falsely be pasted before variable description.

2.1.5 No recording with JM-200-ETH

In device-internal mode, recording was not possible, if the set module was of JM-200-ETH type.

2.1.6 Value input was complicated

If a Setup document was hidden and the online mode activated, value input into an oscilloscope document could be complicated or impossible.

2.2 Hardware Manager

2.2.1 Wrong register type in the Setup page of JX3-THI2-RTD-EI

On the Setup page of the analog inputs of JX3-THI2-RTD-EI modules, REGfloat was displayed as register type instead of float.

2.2.2 Selecting JetCAN

Interface selection for JV-1xxx has been revised. The wrong option JetCAN has been removed.

2.2.3 Context menu of the network node in ST projects

In the hardware tree of ST projects, shortcut menu entries were incorrectly offered in the context menu of the network node for stopping and restarting pub-sub-communication.

2.2.4 Timeout took much longer than set

When trying to connect to the control via the **Test** button, it took much longer than the set timeout until Offline was reported. This affected the CPU and Setup windows. Now the connection attempt is aborted after the set timeout time.

2.2.5 Wrong product name after drag & drop in the hardware scan dialog

If a scanned controller was dragged and dropped into the Current Hardware window in the hardware scan dialog, the product name of the currently configured controller was not replaced.

2.2.6 Data of publishers and subscribers could get lost

Data of publishers and subscribers could get lost at **Save Project As**, when **Copy Project and create New Workspace** was selected.

2.3 Motion Setup

2.3.1 Rounding issue when calculating the overload factor

At selecting a motor in Motion Setup, the overload factor is calculated as well. Rounding values might lead to the product of the rated motor current and the overload factor values slightly exceeding the permitted limit. This results in the values of the servo amplifier not being accepted. Calculation of the overload factor has been adjusted, in order to avoid this rounding issue.

2.3.2 Motion Setup - Presentation issues with Chinese Windows

The presentation issues with Motion Setup and other input masks on Chinese Windows have been solved.

2.3.3 Changing the simulation setting of a multiple axis

If the simulation settings of a multiple axis have been changed, already opened motion setups of the respective axes have not been updated.

2.4 General information

2.4.1 Language selection

The script for language selection from German to English or vice versa did not always work, especially, if no administrator rights had been assigned.

2.5 Editor

2.5.1 No IntelliSense selection

If, at accessing an array, an Enum was used as an index, no IntelliSense list occurred after writing the dot behind the Enum variable.
An error message was issued in the editor in case of certain source code designs

2.5.2 Faulty proposals in case of nested implicit Enum declarations

If a program was assigned to an Enum variable that had been declared as nested implicit Enum type, the correct type was proposed, yet without the name of the corresponding structure, in which the Enum had been declared. IntelliSense now offers the correct information. It

can be ambiguous, though, if several implicit Enum declarations of the same name are being used.

2.5.3 Error message in the editor in case of certain source code designs

In certain source code designs, an error message was issued, when the cursor had reached a keyword. One example for this was the combination of, for example, IF ... THEN ... ELSE CONTINUE, when the cursor had reached CONTINUE.

2.5.4 IntelliSense made Incorrect Suggestions for Enum Variables

For variables of type Enum, IntelliSense incorrectly suggested the possible values of the type.

2.5.5 Go to definition did not work for constructors

Go to definition did not work if it was called on a constructor in a class declaration.

2.5.6 IntelliSense list did not appear in a multiline IF-THEN block

The IntelliSense list did not appear when an IF-THEN block was entered in multiple lines. Multiline means each keyword and the condition are in their own line.

2.6 Setup

2.6.1 Changing an array index by means of the +/- key

In Setup, a numeric array index can be changed by pressing the +/- key. Yet, this did not work with a negative array index.

2.6.2 No checks of entered string lengths

In Setup, the string length was not restricted in certain constellations. For this reason, downstream registers were occasionally overwritten.
Example: An array[5] of string[4]

2.6.3 Faulty block tagging

In string constants in the program text, block tagging could be faulty.

2.6.4 Cursor could disappear

Under the following conditions, the cursor disappeared in the setup window:

- Setup was active
- You moved the mouse pointer from another window into the setup window
- You clicked on a cell in the Name or Number column

2.7 STX language

2.7.1 STX libraries

If there wasn't any LIBRARY, respectively END_LIBRARY in the application program, the error message **TASK expected** was issued. As of now, the message **LIBRARY expected** is issued.