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Version Update



JetSym Version Update from V.6.1.0 to V.6.1.1

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1 New additions

Below, all features newly included in this software version, as well as product enhancements are listed.

1.1 General

1.1.1 Update error messages for JM-3xxx

The list of error messages for JM-3xxx has been updated.

1.1.2 Search results in the Find in Files window

After closing a JetSym project, the search terms in the Find in Files window are now cleared.

1.1.3 Offline deactivation

It is now possible to delicense JetSym without an internet connection.

1.1.4 No warning when two JX3-BN-EC devices use the same port

If the same port is assigned to multiple devices connected to a Beckhoff CU1128, the devices are now marked with a "!" in the hardware tree.

1.1.5 Display of actual speed in the controller's internal oscilloscope

For EtherCAT controllers starting with MCX version 1.22.0.38, the actual speed is now also displayed in register 50xx9243.

1.1.6 Licenses valid for all users

A JetSym license activated by a user on a computer is now valid for all users.

1.1.7 Select All in the Output Window

When the keyboard shortcut **Ctrl** + **A** is used in the debug output window, everything is also selected in the program editor or WatchList, provided they are displayed.

1.1.8 JetSym crashes after starting debugging

JetSym crashed during debugging if a tracepoint was set in a program file, but the program file was not open.

2 Fixed software bugs

2.1 General

2.1.1 CTRL + C in the hardware configuration triggered an error message

If an attempt was made to copy a register address in the hardware configuration while configuring system registers, this resulted in an error message, and the register address was not copied.

2.1.2 Hardware scan did not find all "devices"

The scan in the Hardware Scan dialog was sometimes interrupted when multiple devices were present and only displayed a subset of the devices.

2.1.3 Removal of the "Update OS" button

The "Update OS" button on the axis parameters page has been removed. Use the **"Update OS"** options in the corresponding context menus of the hardware tree.

2.1.4 Module Pages: Connection status was not displayed correctly

For example, on the module pages for third-party devices, the **connection status** was not displayed correctly or was inconsistent with the actual **connection status**.

2.1.5 Spacing between "Date" and "Time"

The date and time were difficult to read in a trace because the spacing between them was too small.

2.1.6 Windows System Information in the Feedback Dialog

In the feedback dialog of **the "Info about JetSym" dialog**, the operating system name and version were displayed incorrectly, e.g., as Windows 10 even though Windows 11 was installed.

2.1.7 Setup contents were incorrectly copied to a watchlist file

If setup content was copied from JetSym versions earlier than 6.1.0 and that content was then copied to the watchlist of a JetSym version 6.1.0 or later, the format was incorrect.

2.1.8 .da file

Existing ".da" files loaded from a controller could not be reloaded onto the controller by JetSym.

2.1.9 OS update for JM-3000

Errors occurred during the OS update of JM-3000 axes.

2.1.10 Error when deleting a star distributor

After deleting a star distributor, errors occurred when compiling a project because not all information was deleted from the hardware XML.

2.1.11 Loading older projects

If projects created with an earlier version of JetSym were loaded, the program might crash when dealing with long file paths.

2.1.12 Trace output caused JetSym to freeze

If tracing was interrupted for an extended period of time (> 5 minutes), JetSym would subsequently become unresponsive and had to be terminated via Task Manager.

2.1.13 Debugger displayed invalid characters in the call stack

If a breakpoint was set in a function within an STX program, invalid characters would appear in the call stack window.

2.1.14 Controller Configuration

When the buttons for system commands were pressed, JetSym might freeze if there was no connection to the controller.

2.2 Editor

2.2.1 Keyboard shortcuts for code folding

The keyboard shortcuts for code folding, **Shift+Ctrl+P** (expand) and **Shift+Ctrl+L** (collapse), as previously specified in the editor's context menu, did not work.
Now the keyboard shortcuts are **Shift+Ctrl+Plus** (Expand) and **Shift+Ctrl+Minus** (Collapse).

2.2.2 Line navigation up/down was blocked

If a period was entered in a line followed by additional characters, e.g., for scoping or with a float or double value, then navigating up or down using the arrow keys was not possible.

2.2.3 Drop-down list: Underscores in function names

Underscores in function names were not displayed in the drop-down list for function and method navigation.

2.3 Version control

2.3.1 Icons for version control were missing

After reinstalling JetSym, the version control icons were missing.

2.4 Watchlist

2.4.1 Display of values in Properties

The display of values in Properties no longer worked after vertical scrolling.

2.4.2 Error when writing values to properties

The values were not written to the selected property, but to the property of the instance last declared in the program.

2.4.3 Incorrect bit display on Big-Endian controllers

On controllers with Big-Endian memory architecture processors, such as JC-3xx controllers, bits were not displayed correctly (as false).

2.4.4 Checksum comparison error

Error messages (e.g., "Data does not match the data in the controller") were displayed for some values, even though a download, **comparison, and upload** had taken place.

2.4.5 No negative exponents allowed for floating-point numbers

When attempting to enter the value of a variable of type "float" or "double" with a negative exponent, a minus sign could not be entered.

2.4.6 "Modified" flag for a file after going online

After going online, the **"Modified" flag**, indicated by "*" in the title bar of a WatchList file, was incorrectly set when variables of the **Property** type were used.

2.4.7 Favorites in the Watchlist were lost

If favorites were set in the WatchList within expanded structure elements, they would disappear after collapsing and then expanding the structure element again.

2.4.8 Value entry for complex variables

In the Content column, it was incorrectly possible to enter a value for complex variables of the types array, struct, object, interface, and enum.

2.4.9 IP addresses could not be changed

If a value in the Content column was set to **an IP address**, a changed value was not applied after pressing the Enter key.

2.4.10 Property value display incorrect for "byte" type

For properties of the "**byte"** type, the value **0** was always incorrectly displayed.

2.4.11 Required data type was not restored

Previously selected data types were not restored when loading a WatchList file. Instead, **"int"** was always displayed.

2.4.12 Boolean values set to True using the minus key

Values displayed in the Content column were reset to **true** when decremented using the minus key if the value was already false.

2.4.13 Floating-point numbers were displayed incorrectly

This could result in unwanted rounding and the display of too few valid decimal places for floating-point numbers.

2.4.14 Pasting a value from the clipboard into the Content column

After pasting a value (string) from the clipboard into the Content column, it was immediately overwritten by the current value.

2.4.15 Copying/pasting "registration numbers"

Copying the **register number** from the "Column - Reg. No." and pasting it into "Column - Name" did not work.

2.4.16 Values of task-local constant structures and constants

Values of task-local constant structures and constants were not displayed.

2.4.17 Default update interval

The update interval was set to 1000 ms instead of 300 ms.

2.4.18 Comments were deleted

After expanding and collapsing structures, existing comments were deleted.

2.4.19 Value after leaving a field

A changed value was not reset after leaving a field without confirming with Enter.

2.4.20 Error with keyboard shortcuts

If the value in the Content column was incremented or decremented using the "Shift" and/or "Ctrl" keys in combination with "+" or "-" in rapid succession, it was incorrectly incremented or decremented by one step (1, 10, or 100) too many.

2.4.21 Values of complex structures were not displayed

The values of complex variables, e.g., of type struct or array, were not displayed if the variables were not yet in the visible area when a watchlist file was opened.

2.4.22 Incorrect display of local and global string constants

Local (task) and global string constants were displayed incorrectly.

2.4.23 The "Lock Input" option did not work

The "**Lock Input"** option in the **settings** did not work. Values in the watchlist could still be changed.

2.4.24 Local structures could not be expanded

Local (task) complex variables, e.g., of type struct or array, could not be expanded if they were declared in the last lines of a watchlist document.

2.4.25 No input dialog for variables of type int64 and qword

For variables of type int64 and qword, the values could not be changed because the input dialog did not open.

2.4.26 Save All did not save the state of arrays

The **Save All** function did not save whether arrays were expanded or collapsed. Only the **Save** function saved the state of arrays.

2.4.27 Activating the Favorites view

If **activating** the "Favorites" view caused complex variables, such as structures or arrays, to be collapsed, it could happen that no values were displayed starting from a certain line.

2.4.28 Empty string for string variables

For variables of type string, an empty string could not be entered as a value in the "Content" column.

2.4.29 Value could not be edited directly

When you click on a value in the watchlist, a dialog box opens where you can edit the value. However, the value was not selected in the dialog box and could not be edited directly.

2.4.30 The IP address of the active controller was not displayed

When a connection to a controller was established, the IP address was not displayed in the title bar.

2.4.31 Array expressions with non-constant indices

Array expressions with non-constant indices did not work. Variables dereferenced with @ could not be cast to inputs/outputs, registers, regstrings, or tasks.

2.4.32 Variables of type Timer

Values could not be entered for variables of the **timer** type.

2.4.33 JetSym crash after “Rebuild All”

If the structures or objects displayed in a WatchList contained pointers to themselves, JetSym crashes after compiling the project.

2.5 Monitor

2.5.1 No display in the monitor

In certain cases, the monitor did not display any values.

2.5.2 Task-local structures could not be expanded

Variables of type **struct** could not be expanded in the monitor.

2.5.3 Crash on lines with string constants

With the monitor active, JetSym crashed when navigating to a line containing a string constant.

2.5.4 With Int64, it was not possible to enter minimum and maximum limits

For the Int64 data type, the specified minimum and maximum limits could not be entered.

2.6 Hardware Tree

2.6.1 Tooltip for a technology group

The tooltip for a technology assembly did not update immediately when the type of a follower axis in the assembly was changed.

2.6.2 "Hardware" and "WatchList" no longer opened

If the **auto**-hide mode was enabled for the workspace windows (pin icon locked/horizontal), the **Hardware** and **WatchList** windows no longer expanded.

2.7 Compiler

2.7.1 Chinese characters in compiler message (for missing task declaration)

If a task was referenced in a program—for example, in a `TaskContinue` statement—that had never been declared, the name of the task was displayed in the compiler error message using an incorrect character encoding.

2.7.2 Error message for interface implementations with overloads

When implementing an interface method in a class for which multiple overloads exist, misleading error messages were previously displayed if the parameter types or the return type did not match any of the declared interface methods. The cause was that the existing error messages did not take the available overloads into account.
This behavior has been corrected: The new error message **3580** now clearly indicates that no matching interface declaration exists. Additionally, all relevant interface declarations are listed in the compiler output to facilitate debugging.

2.7.3 A bit number greater than 31 could not be assigned to a "bit variable"

Mapping of bits to 64-bit integer variables is now also possible for bit positions > 31

Example declaration:
bit63_i64_1: Bit at &i64_1.63;

Previously, it was not possible to specify bit positions greater than 31, even when using a 64-bit integer variable. This compiler error has now been fixed. Mapping up to the 64th bit, as in the example above, is now possible.

2.7.4 Compiler error 3530

64-bit integer types (int64, qword) in structs and arrays can now be initialized at declaration; previously, this resulted in compiler error 3530.

2.8 STX

2.8.1 Different bytecode due to const array access

When accessing const arrays—that is, arrays located in the const pool—the 6.1 compiler generated different bytecode than the 5.7.x compiler. The cause was a code change related to the introduction of const pointers. The code change is correct and necessary, but it has been supplemented so that the const pointer is still loaded onto the stack later.

2.8.2 PDO Input/Output: Assigned STX variables were not displayed

If ThirdPartyDevices were used in a project and STX variables were assigned to the PDO inputs/outputs, these were not displayed even after compilation.

2.8.3 Handling Pointer to Located

It is now possible to compare Pointer To Located to a value other than zero, explicitly assign a zero to this pointer, and specify a default value of zero for a parameter. To this end, the type compatibility of Pointer To Located has been extended to Int32.

2.9 Motion Setup

2.9.1 No update when hardware configuration is changed

If the hardware configuration was changed and the configuration files were loaded onto the controller, an open Motion Setup page was not updated.

2.10 Modular App Kit

2.10.1 Updating the generated code after a hardware change

If a change was made to the hardware after an I/O assignment and regeneration of the MAK code for example, by changing the order of the modules the MAK code was not updated.

3 Important Notes

3.1 License invalid after Windows Update

In some cases, the JetSym license was lost after a Windows Update. JetSym would then only start in demo mode. To be on the safe side, de-license JetSym before a Windows Update and relicense it after the Windows Update.

3.2 Security Updates

Security updates for JetSym address security vulnerabilities only in the specific version. These security updates do not apply to other versions of JetSym already installed on the computer. It is the user's responsibility to determine whether these versions of JetSym are still safe to use.