



JetSym
Versions Update
from V5.10 to V5.12



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1 Introduction

| Overview of Version Update | | | |
|----------------------------|--|----------|-----------|
| Version | Function | expanded | corrected |
| V5.1.1 | New Motion-API Version 1.0.0.7 | ✓ | |
| | Incorrect Display after Program Download | | ✓ |
| | Faulty Compilation | | ✓ |
| | Incorrect Labels in Registry Dialog of German JetSym | | ✓ |
| | One of Online Help's Examples could not be compiled | | ✓ |
| | Exception during Debugging | | ✓ |
| | Connection Loss to Team Foundation Server | | ✓ |
| | Compiler Warnings in ST-Projects | | ✓ |
| | Program Crash during Hardware Scan | | ✓ |
| | Adjustments within SYMPAS-API | | ✓ |
| | Trace Outputs in Tasks without Loops | | ✓ |
| | Program Crash after Keyboard Inputs | | ✓ |
| | Setting Window Focus over Keyboard | | ✓ |
| | Port Number in Dialog "Other Sources" | | ✓ |
| | Error Message in Output Window "Build" | | ✓ |
| | Task-Local Variables of Type "Array of Bool" | | ✓ |
| | Incorrect Value Display in Monitor Window | | ✓ |
| | Wrong Status Display in Connection with TFS | | ✓ |
| | Document mistakenly moved to the Back-ground | | ✓ |
| | Troubles with "Project Save As" | | ✓ |
| | Missing Entries in Context Menu | | ✓ |
| | Wrong Default Settings in Dialog "Find in Files" | | ✓ |
| | Incorrect File Name in Monitor Window | | ✓ |
| | Indirect Addressing of In-/Outputs | | ✓ |
| | Differences between Monitor and Setup | | ✓ |
| | Problem with Intellisense Update | | ✓ |
| | Repeatedly Displayed Dialog | | ✓ |

| | | | |
|--|--|--|---|
| | Incorrect Display after Hardware Scan | | ✓ |
| | No Spell Check after Renaming File Name | | ✓ |
| | Incomplete Context Menu in Monitor Window | | ✓ |
| | Showing Bus Systems not supported | | ✓ |
| | Misbehaviors at Project Conversion | | ✓ |
| | Saving Number Representation in Setup Window | | ✓ |
| | Crash of JetSTX Operating System | | ✓ |
| | Incorrect Take Over of Parameters in Motion Control | | ✓ |
| | Calculation of Module Traverse Range | | ✓ |
| | Incorrect Appearance of Resolver Resolution | | ✓ |
| | Inadvertent Destruction of Setup File | | ✓ |
| | Wrong Register Addresses in Motion Setup | | ✓ |
| | Unrequired Behavior at Restart of JetSTX-VM | | ✓ |
| | Crash when opening Projects created with Previous Versions | | ✓ |
| | Dialog "Add Module" keeps being Visible | | ✓ |
| | Hang-Up when Loading a Project | | ✓ |
| | Version-Dependent Differences in Export Files (.jde) | | ✓ |

2 Expansions

2.1 New Motion-API Version 1.0.0.7

The execution of a task restart while a Motion Control remote procedure call is still in progress could cause some troubles. This misbehavior is fixed from this version onwards.

3 Eliminated Software Bugs

3.1 Incorrect Display after Program Download

Right after a program download it occasionally happened that no values or a wrong task status were displayed within the setup or the monitor window for a certain time being. This misbehavior's probability of occurrence has been reduced to a minimum. However a final bug fix will not be available until JetSym version 5.2 together with new controller's operating systems.

3.2 Faulty Compilation

Some expressions like "var := var + 2 - 1" were translated incorrectly by the compiler. As a consequence wrong values were then calculated at runtime.

3.3 Incorrect Labels in Registry Dialog of German JetSym

In the registry dialog of the German version of JetSym some labels were incorrect. They are now corrected.

3.4 One of Online Help's Examples could not be compiled

There was a program example on the online help's page, where the declaration of constants is explained, which could not be translated by the compiler.

3.5 Exception during Debugging

Under special circumstances an exception could occur during the debugging.

3.6 Connection Loss to Team Foundation Server

If a JetSym project's change set was retrieved previously checked in by a different user, then the connection to the Team Foundation Server (TFS) was lost and needed to be reestablished by the user.

3.7 Compiler Warnings in ST-Projects

The behavior of showing compiler warnings within JetSym-ST projects is now equalized to the one within JetSym-STX projects. So if now an unchanged ST project is compiled the message “up-to-date” appears and not “0 error(s), 0 warning(s)” like before.

3.8 Program Crash during Hardware Scan

If both a controller of type “JC-24x STX” as well as a server drive of type “JM-2xx” were located in the same Ethernet network, then JetSym crashed during the hardware scan.

3.9 Adjustments within SYMPAS-API

A few adjustments were made within the SYMPAS-API. Now all axis functions are using the same divisor for the axis number.

3.10 Trace Outputs in Tasks without Loops

The trace outputs did not work properly if there were now loops programmed in the task where they were implemented.

3.11 Program Crash after Keyboard Inputs

JetSym program could crash after a certain sequence of user inputs over the keyboard. It could only happen if JetSym is operated over the keyboard only without using the mouse device.

3.12 Setting Window Focus over Keyboard

There was no possibility whatsoever to set the focus to the window containing one of the workspace’s trees.

3.13 Port Number in Dialog “Other Sources”

After opening dialog “Other Sources” within the definitions of a variables of an oscilloscope document the port number’s value was always set to 0 (zero).

3.14 Error Messages in Output Window “Build”

Moving forward within the error messages shown in the output window “Build” by using F4 key it could happen that the error text selected was not completely visible and was partially covered by the horizontal scroll bar.

3.15 Task-Local Variables of Type “Array of Bool”

At task-local variables of type “Array of Bool” the last element’s value could not be monitored. The text “unkown name” was shown in column “Number” instead.

3.16 Incorrect Value Display in Monitor Window

At task-local variables of type “Array of Bool” the last element’s value could not be monitored. The text “unkown name” was shown in column “Number” instead.

3.17 Wrong Status Display in Connection with TFS

If documents were checked-in to and checked-out from a Team Foundation Server quickly in a row then the status display did not update immediately. Therefore an incorrect status was displayed for a certain time being.

3.18 Document mistakenly moved to the Background

After a prompt message shown when closing an unsaved document was answered by clicking on the “Cancel” button the document’s window was automatically moved to the background and became invisible.

3.19 Troubles with “Project Save As”

Copying a project by using command “Project Save As” could cause some troubles if not all project’s documents were saved before. From this version onwards all documents are save before the copying process is started.

3.20 Missing Entries in Context Menu

The context menu of a STX data document (*.stxda) in the workspace’s tree did not offer entries for the version control.

3.21 Wrong Default Settings in Dialog “Find in Files”

Under certain circumstances the opened dialog “Find in Files” did not show “Current Project” as expected, but a defined path to be the searching path.

3.22 Incorrect File Name in Monitor Window

After the active project was changed while the active monitor window was shown, then the project name in the header was updated correctly, but not the filenames in their columns.

3.23 Indirect Addressing of In-/Outputs

In the setup window the indirect addressing of in- and outputs did not work properly. Additionally resident variables (%rl) could not be used as pointers involved in an indirect addressing. From this version onwards besides %vl-variables resident one (%rl) of type “long” can be used for indirect addressing as well.

3.24 Incomplete Update of Window “CPU”

Switching from controller type “JC-3xx” to “JC-9xx” or vice versa the entries in the diagnosis tree were not updated correctly. They stayed incorrectly until the window “CPU” was closed and reopened.

3.25 Differences between Setup and Monitor Window

In a previous version numeric values displayed in the setup window in binary or hexadecimal format were adjusted in the manner that the display width is defined by the memory size of its type (1-, 2- or 4-byte). From this version onwards the same behavior has now been implemented in the monitor window too.

3.26 Problem with Intellisense Update

Caused by an unknown error in the Intellisense update process array variables could not be expanded in the setup window because the symbol needed to do this was missing.

3.27 Repeatedly Displayed Dialog

The context menu was opened in the project tree “Files” without executing a command. If this menu was reopened followed by the execution of a command, then it could happen that the same dialog mistakenly appeared on screen several times in a row.

3.28 Incorrect Display after Hardware Scan

After a controller had been selected by performing a hardware scan, the controller type as well as the operating system version was updated correctly in window "CPU", but in field "IP-Address" the entry of the previous selected controller was still shown.

3.29 No Spell Check after Renaming File Name

When renaming a file over the entry in the tree window "Files" there was no spell check for invalid characters performed.

3.30 Incomplete Context Menu in Monitor Window

Under certain circumstances not all entries expected were displayed in the context menu opened by a right mouse-click in the monitor window.

3.31 Showing Bus Systems not supported

After a controller selection done using a hardware scan, bus systems could be displayed which are actually not supported by that particular controller type.

3.32 Misbehaviors at Project Conversion

Under certain circumstances the conversion of a JetSym to a JetSym-ST project could mistakenly produce two subroutines out of originally one. On the other hand the conversion of a JetSym-ST to a JetSym-STX project did not convert some of the commands. Additionally the file "SympasAPI.stxp" was not included into the project even when it would have been necessary because of some commands used within the project's program.

3.33 Saving Number Representation in Setup Window

After changing the number representation within a structure displayed in the setup window followed by collapsing and expanding the structure itself, the changed number representation was only taken over at lines having a commentary defined. In another similar scenario neither the number representation nor the commentary were saved.

3.34 Crash of JetSTX-VM Operating System

The operating system of the in JetSym integrated controller type JetSTX-VM could crash if there were STX-variables queried within a setup document not belonging to the program.

3.35 Incorrect Take Over of Parameters in Motion Control

Because of a bug found in the Motion-API the parameters velocity, acceleration and jerk of a path group were not taken over.

3.36 Calculation of Modulo Traverse Range

In offline mode the modulo traverse range was not recalculated after a change of one of its limits.

3.37 Incorrect Appearance of Resolver Resolution

Under "Feedback" in the motion control window a resolver resolution value was shown even when the controller was offline and there was no possibility to edit this value.

3.38 Inadvertent Destruction of Setup File

If inside a setup window the key combination Ctrl-Shift-Minus was pressed while the focus lied in another column than "Content", then the variable name could not be resolved anymore. If the user closed the window then the related setup file was destructed and could not be reloaded anymore.

3.39 Wrong Register Addresses in Motion Setup

If a module of type "JX6-SB-I" was located at sub-module 2 of a controller JC-647 and two MC-axes were connected to this module, then tooltip shown in the "old" version of the motion setup displayed an incorrect register value. With further operations various other bugs up to a program crash could be generated.

3.40 Unrequired Behavior at Restart of JetSTX-VM

If a controller of type JetSTX-VM (integrated in JetSym) was restarted by a STX-command within a program, then not only the simulation controller, but also the Windows operating system restarted.

3.41 Crash when opening Projects created with Previous Versions

Opening a project created with one of the previous versions into JetSym V5.1 a program crash could occur during the loading process caused by a missing parameter.

3.42 Dialog “Add Module” keeps being Visible

The dialog “Add Module” opened within the hardware manager mistakenly got the attribute “Topmost” and kept being in the foreground, even when switching to another program.

3.43 Hang-Up when Loading a Project

If “#include”-statements were placed in a program in that manner that circular references were created, then JetSym hung up during the loading process and could not be operated, because the Intellisense process went into an endless loop. From this version onwards, the Intellisense process will be aborted immediately after detection of the first circular reference. Because of this alteration the data of the Intellisense update might not be complete, if there is a circular reference located somewhere in the program.

3.44 Version-Dependent Differences in Export File (.jde)

If with the same project exports file for JetViewSoft was created (.jde) using JetSym Version 5.02 and Version 5.10, then there were differences in the address data of structures containing inputs, outputs and flags.