![Jetter automation logo]

JetSym

Version Update from V. 5.1.2 to V. 5.2.0

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Data Consistency with Commands "BitSet" and "BitClear"			✓
Incorrect Addressing in STX Structures			✓
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Description	New	Enhanced	Fixed
Warning Message at Change in Motion Setup			✓
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Misbehavior at Oscilloscope Recording			✓
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Profiler Channel at Oscilloscope			✓
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Flag's Reference as a Function Parameter			✓
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Incorrect Text in Dialog "Find in Files"			✓
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1 Introduction

Description	New	Enhanced	Fixed
Flags in Compatible Mode (Oscilloscope)			✓
Program Crash during "Find and Replace"			✓
Settings in Dialog "Find in Files"			✓
Copy/Paste in Declaration File			✓
Wrong Unit at Command "MotionReadValue"			✓
Program Crash during Size Change of Oscilloscope Window			✓
No Controller Restart Possible			✓
No Comment in Tooltip			✓
No Active Project after Conversion from ST to STX			✓
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Takeover of Pub/Sub-Variables			✓
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Misbehavior with Expression "[export jde]"			✓
Bug in English Online Help			✓
No Validation of Timeout Entry in CPU Window			✓
Misbehavior in Oscilloscope Window			✓
Display of Time Members within a Structure Array			✓
No Support of Expanded Semaphores in JetSTX-VM			✓
Copying/Moving Axes			✓
Unexpected Closing of Configuration Window			✓
No Compiler Error with Standalone Command "REG"			✓

Description	New	Enhanced	Fixed
Program Crash during File Transfer			✓
Incomplete Tooltip Display			✓
Bad Operability when Controller Offline			✓
Incorrect Compiler Error with Empty Optional Parameters			✓
No STX Variables Value Display			✓
No Focus Change from Setup Window			✓
No Adjustment of EPROM File Extension			✓
Incorrect Program Comparison			✓
No Adjustment at Change of Structure Array Index			✓
Hidden Control Elements in "Compare & Download"			✓
Incorrect Register Display in Motion Setup			✓
Program Crash at Selection of Data Dump File			✓
Program Crash at Insertion of Motion Command "MotionCamDefine"			✓
Project Folder Cannot Be Deleted			✓
Index Value Change within a Structure Array in a Setup Window			✓
Maximizing Dialog "Compare & Download"			✓
Project Folder Cannot Be Deleted			✓
Bug at Conversion of a JetSym ST Project to JetSym STX			✓
Active Trace after Changing to a JetSym or JetSym ST Project			✓
Program Crash when Opening or Updating a Tooltip			✓
Incorrect Value Display of Variables having Type "char"			✓

2 New features

Introduction   All new features and extensions of this version are listed subsequently.

2.1 New User Interface for MC-Axes

User Interface MC Axis   Besides the one for the standard axes there is now a new user interface for motion control axes available. Axes groups are still excluded and need the former motion setup to be edited and monitored.

2.2 Counter for Tasklock/Taskunlock

Tasklock/Taskunlock   There is a counter for the command pair "Tasklock/Taskunlock" introduced with this version. If command "Tasklock" has been called n-times, then command "Taskunlock" needs to be called n-times as well to re-enable the interpreter to switch to another task. For a better troubleshooting there is a possibility to monitor the counter for locking/unlocking tasks on monitor window's page "Task".

2.3 Communication Module JX3-COM-EIPA

JX3-COM-EIPA   The communication module JX3-COM-EIPA is supported from this version onwards.

2.4 Default Directory for new Workspaces

User Defined Default Directory   The default directory for creating a new workspace used to be at a fixed location. From now on the user can alter it permanently using command "Tools/Options".

2.5 Suppressing a Compiler Warning with Directive

Supressing a Compiler Warning

With the help of a compiler directive "#pragma" it is possible to suppress the output of a certain compiler warning. The output is suppressed after the following directive:

#pragma warning(disable:xxxx)

'xxxx' is the placeholder of the compiler warning number to be suppressed. The suppressing can be switched off with the following directive:

#pragma warning(enable:xxxx)

2.6 Warning for Multiple Use of BITS-/ENUM-Constants

Multiple Use of BITS-/ENUM-Constants

From now on the user is informed during the compilation of the program if two different BITS- or ENUM-constant names were addressed to the same value. With the help of this new feature the troubleshooting will be easier in case this happened unintentionally. If this addressing is intended by the user the warning output can be suppressed by either setting the warning level to less than 3 or by using a "#pragma" directive described in chapter 2.7.

2.7 Automatic Deactivation of Setup Window

Deactivation of Setup Window

Until now the setup window has been deactivated automatically as soon as its document did not belong to the active project anymore. It was hardly visible when a window had been deactivated. Additionally the document was not reactivated when due to a change of the active project it became part of it again. From this version onwards a deactivated setup window are characterized by a gray text font coloring. The window is now reactivated as well as soon as its document becomes part of the active project again except when the deactivation was done beforehand by a manual user operation..

2.8 JetSym Version Check during Load of Project

JetSym Version Check

The JetSym version is now saved in a project and a workspace file which they were edited with before. If the project or workspace is then loaded within a different JetSym version, then the user will be prompted to confirm the continuing the loading. This new method should prevent the user to inadvertently modify the project or workspace file.

2.9 Exclusion of STX Program Files from Debugging

Extended Debugging   Particular STX program files can now be excluded from debugging by using a command to be found in the context menu to be opened with a mouse-right-click on a file icon in the project tree. To give an example: By this exclusion the debugger will not step into a libraries function. For more information please refer to the online help.

2.10 Improved Transfer of Initialization Values

Transfer of Initialization Values   The data file containing the initialization values created by the compiler is now transferred to the controller before the program is downloaded. Additionally all corresponding %vl-registers will be set to the correct value type. This way it is now avoided that incorrect initialization values can be written to the controller.

2.11 Standard Display of Online/Offline Values

Online/Offline Values   The appearances of online/offline values in setup windows, in monitor window as well as in the motion setup have been unified. Please refer to online help for more information.

2.12 Conversion of Declaration Files

Converison of Declaration Files   It is no longer common to use declaration files within STX projects. It is recommended to use variable declaration blocks instead which is defined within the program itself. To prevent the user from manually transferring all variables defined in the declaration file to the program editor there is now a more practical way to do so. The content of rows selected in the declaration file can now be copied to the clipboard and then be pasted in the program file where a variable block containing the same declarations is created.

2.13 Selecting Variable Type in Setup Window

Restricted Selection of Variable Types

Within the setup window the variable type can only be altered by the user if a register number or register variable is monitored. Type "int" or "float" cannot be forced anymore because the register type is already fixed by the program itself. Monitored variables are showing the declared type. The type string displayed for structures and pointers is "auto" or an empty string.

2.14 Showing JetSym Files in Windows Explorer

Open Project Directory in Windows Explorer

Over a command of a project tree file object context menu the Windows Explorer can now be opened where the file's directory is opened and the corresponding file is already selected. Additionally files can now also be included to the JetSym project by just a Drag&Drop operation from the Windows Explorer to the JetSym program. Of course a check will be performed to verify that the file type fits into required folder of the project tree.

2.15 Handling Write-Protected Files

Write Protected Files

The user will now be informed at his first attempt to alter a write-protected file. If command "Replace in files" is called and one or several files are write-protected, then the replacing progress is aborted immediately after the detection of the first one and the user is informed accordingly. In the output window the path of the write-protected file is display besides the text to be replaced.

2.16 "Collapse All"/"Expand All" in Setup Window

"Collapse All"/"Expand All"

With the help of two new commands "Collapse All" and "Expand All", array as well as structures can now be opened and closed completely in one go within the setup window.

2.17 Update of Motor Database

Updated Motor Database   The motor database now contains the new motor types (JHN).

2.18 Indirect Register Access in Setup Window

Indirect Register Access   Since a very long time it is possible to access indirectly to register values. A register used to point to another one contains the number of the register to be monitored. The indirect addressing also works when a %vl-Variable was used as a pointer, while this was not possible with STX variables neither addressed with %rl nor without any addressing. From this version onwards these variables can be used for indirect addressing on condition that their data type is "int". But it has to be noted at this point that two commands has to be sent to the controller when a new value is written to a controller's using a STX variable without register addressing as a pointer. The first command reads the current value of the STX variable, the second then uses this value read to write the new value to the registers the variable is pointing to. Between these two commands there is the danger of inconsistency for a short time because in the meantime the STX program could change the number in the STX variable used as a pointer. It is up to the user to ensure that this does not happen or has an effect which is not requested.

2.19 Revised "New Project" Dialog

Dialog "New Project"   The dialog "New Project" was revised. Besides other alterations the width of the edit fields for the file and project paths were enlarged. Additionally the dialog's window size is now user adjustable.

2.20 File Upload from Controller

File Upload from Controller   In the controller's file explorer available in the "CPU" window, besides the ability to see the structure of the controller's file system as well as the contents of the files it is now possible to upload one or several files, even complete directories to the PC.

2.21 New Hardware in Hardware Manager

JX-AI4-EI   From this version onwards the following module is supported by the hardware manager: "JX-AI4-EI".

2.22 Type Mapping in Register Range

Type Mapping in Register Range   If variables, structure elements or arrays of type "double" were mapped to registers using "%rl"-addressing, then the type of the two registers containing the "double"-value were set to type "float" and their values were displayed in the setup window accordingly. Because this does not make any real sense, the type of these two registers are now set to "int".

2.23 New Axis Module JM-200-ETH

JM-200-ETH   From this version onwards JetSym supports the new Ethernet axis module JM-200-ETH, which has compared to the already known module JC-310-JM no controller functionality. This module replaces its predecessor JM-200-OEM and can be used from now on as its replacement.

2.24 New Motion-API Version 1.0.0.9

Motion-API Version 1.0.0.9   This version of JetSym comes with a new version of the Motion-API (Version 1.0.0.9). See the online help fordetails.

3   Fixed software bugs

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

Tasklock with BitSet/BitClear

Symptoms   Locking a task did not work, if there was a "BitSet"- or "BitClear"-command located in the area surrounded by the command pair "Tasklock"/"Taskunlock". The reason for this was the fact the both bit operation commands need to lock the task during their performance and unlock them at the end. With the help of the newly introduced counter for locking/unlocking a task as described in chapter 2.3 this bug is now permanently fixed.

Remedy/workaround   -

Interaction between Enumeration and Class Definition

Symptoms   An enumeration is defined without using the keyword "enum". In the same program there is a member of an array type declared having the same name as one of the enumeration constants. It was impossible under these circumstances to expand the array tree of the member variable in the setup as well as in the monitor window.

Remedy/workaround   -

Data Consistency with Commands "BitSet" and "BitClear"

Symptoms   During the execution of the commands "BitSet" and "BitClear" the task is locked. This way another task is not able to change the register value while one of the two commands is still in progress. However this protection only worked locally on the controller. So there was the possibility that the register value could be altered by another controller using one of the network commands like "N_Copy_To". With the new commands "NetBitSetReg" and "NetBitClearReg" the protection now works network wide.

Remedy/workaround   -

Incorrect Addressing in STX Structures

Symptoms   It occurred in rare cases that the structure members showed different addresses in the setup window compared to the same ones displayed in the monitor window.

Remedy/workaround   -

Changing Localized Pointer Address

Symptoms   Up the now it was not possible to change the address of a localized pointer within the monitor window. This can now be done from this version onwards.

Remedy/workaround   -

Font Size in Motion Setup

Symptoms   As part of the motion setup revision mentioned in chapter 2.1 the misleading entry is now removed in the dialog "Tools/Options/Motion" for single and for MC axes.

Remedy/workaround   -

Warning Message at Change in Motion Setup

Symptoms   If inside the motion setup a virtual rotary axis was altered from bidirectional to unidirectional, then because of an incorrect default value the warning message 1104 appeared on screen ("Reference run: Unidirectional axis cannot be referenced biphasic"). With the introduction of the revised motion setup (refer to chapter 2.1) this bug is now fixed.

Remedy/workaround   -

Displaying Strings with Register Number

Symptoms	In the setup window string could be monitored by either giving the string variable name or by entering a register number and selecting the string type. However up to now monitoring strings with register numbers offered "string" as well as "regstring" for the type selection too, even "regstring" should be the only possible type here. This bug was now fixed during the revision of the setup window.
Remedy/workaround	-

Reading/Writing Data Dump Files from/to JetSTX-VM

Symptoms	Neither command "FileDARead" nor "FileDAWrite" (used to read/write data dump files) did work in a program running on the virtual controller JetSTX-VM. From this version onwards this bug is fixed.
Remedy/workaround	-

Incorrect Line Number in Task Window

Symptoms	Tasks not identified with keyword "autorun" were started from another task and ran through to the end. After they ran through, the tasks page of the monitor setup window showed the task's last line number, which is correct. But as soon as the controller program had then been restarted with the JetSym command, the task monitoring still showed the number of the task's last line. From now on the task line number in the monitor will be reset to the first line at the restart of a controller program.
Remedy/workaround	-

Writing Incorrect Initialization Values

Symptoms	With the expansion described in chapter 2.12 it will be avoided in the future, that initialization values were written in the incorrect type format (e.g. "int" instead of "float") to the controller depending on program actually running before the program download is performed. Please note that the operating systems of the controllers JetSym communicates with needs to be updated as well to fix this bug. The operating system files needed for the update can be found in JetSym's installation directory.
Remedy/workaround	-

JetSym Hang-Up at Intellisense Update

Symptoms	If a class contained a member pointer variable to itself, then JetSym hung-up during the Intellisense update process. This does not happen anymore from this version onwards. Instead a compiler error message will be shown in the output window.
Remedy/workaround	-

Opening Office 2010 Files

Symptoms	A double click on an office 2010 file icon located in the project tree now starts the office program like Word or Excel itself, because they cannot be loaded with JetSym's active document server anymore.
Remedy/workaround	MSOffice 2010 documents should not be opened within previous versions of JetSym. They should be opened by the according MSOffice program itselg.

Using "this"-Pointer with "protected" Members

Symptoms	Compiling a program was aborted with error no. 3871 ("No access to protected object members "baseclass.value"), if the "this"-pointer was used within a method of a derived class to access protected class members.
Remedy/workaround	-

Inconsistent Display of "char" Values

Symptoms	The value display of variables of type "char" was different between the setup and the monitor window. While the character as well as its numeric value was displayed in the setup window, the monitor just showed the character only. From this version onwards the monitor displays character values the same way as the setup window does.
Remedy/workaround	-

Intellisense Update after Renaming an Identifier

Symptoms	From now on an update of Intellisense is performed immediately after renaming an identifier. This way it is ensured that Intellisense always offers a current selection list of all identifiers available.
Remedy/workaround	Trigger Intellisense update manually, e.g. by building the program.

Jumping to Source Code after Renaming an Identifier

Symptoms	After renaming an identifier JetSym offers the possibility to jump to the locations they have been renamed by a double click on the entry in the output window. This feature did not work within setup and oscilloscope documents. It showed an incorrect selection in setup documents, within oscilloscope documents there was nothing selected at all.
Remedy/workaround	-

Misbehavior at Oscilloscope Recording

Symptoms	An oscilloscope document had been closed while a recording started by a trigger was still in progress. After the document was reopened and an attempt to upload the data from the controller was made, then the status kept staying on "Connecting…" From this version onwards the correct status ("Ready") is shown and the user is informed about the recording still being in progress.
Remedy/workaround	-

Command "Undo" with Structures

Symptoms	After executing command "Expand All" with a structure monitored in the setup window command "Undo" was executed several times. This procedure always ended in an odd display of the structure.
Remedy/workaround	Close and re-open the structure.

Profiler Channel at Oscilloscope

Symptoms   Profiler channels will now always be displayed in stepped mode, because this is the only way showing them correctly. Up to now it was necessary to switch to stepped mode display manually.

Remedy/workaround   -

Side Effect using Macro "Limits"

Symptoms   The JetSym ST command "Limits" usable for an instruction as well as for a query was not taken over to the STX language because of plausibility reasons. But for compatibility reason a macro with the same name was introduced within the STX language. But using this macro has the side effect, that the variable value to be checked for its limits needs to be read twice, once for the comparison with the upper and once more to compare it with the lower limit. It is therefore recommended not to use this macro in STX programs. Please refer to the online help for more about this topic as well as for an example how to realize the limits check inside the program without losing any functionality..

Remedy/workaround   Stop using the deprecated command „Limits" in STX programs.

Flag's Reference as a Function Parameter

Symptoms   If a function's input parameter was a reference to a flag and this parameter was used within the function, then the operating system crashed without using the memory protection. This is an expected behavior, but the user should be informed about it over a compiler error. This is now the case from this version onwards.

Remedy/workaround   -

Direct Usage of Pointer Returned by a Function

Symptoms   The compiler allows the direct usage of a pointer which is returned by a STX function (e.g. @foo := 10), but in previous version it was not translated correctly. This bug is now fixed.

Remedy/workaround   -

Message during Connection Attempt over CAN

Symptoms	During a connection attempt to a controller over CAN interface it happened occasionally that the message "Could not load library VCImpl.dll!" appeared on screen. This is prevented from this version onwards.
Remedy/workaround	-

Relevant Project Files

Symptoms	In this version's online help a list of relevant project files can be found, which need to be handed over or to be kept under version control to ensure that the project can be fully compiled and is properly functioning.
Remedy/workaround	-

No Compiler Error at Usage of Protected Functions

Symptoms	A class containing a protected function is derived twice. Within the second derived class a function is defined where the protected function of another base class object was called. This is not allowed and should cause a compiler error which was not the case in previous JetSym versions.
Remedy/workaround	-

No Download & Debug at Partial Download

Symptoms	If option "Partial Download" was selected in the project settings it was not possible to download a program automatically followed by the start of a debug session. The program flow was not interrupted at a breakpoint. From this version onwards the Download & Debug functionality is working properly even in this case.
Remedy/workaround	If a program should stop at a breakpoint located at the program beginning, the option „Partial Download" should be deactivated.

Half Visible Edit Field in Motion Setup

Symptoms	On page "Parameters/Motor" inside the motion setup for MC-axes only the upper half of the edit field for the intermediate circuit voltage was visible. As part of the motion setup revision this bug in now fixed.
Remedy/workaround	-

Number Coloring in Program Editor

Symptoms	Depending on the format (hexadecimal, decimal, binary) numbers were not colored correctly within the program editor. From this version onwards all number formats are shown in the correct color.
Remedy/workaround	-

Changing Write-Protected Files

Symptoms	Certain user operations altering a document like "Comment Block", "Uncomment Block" or "Find in Files" could be performed without any warning even when its file was write-protected. The user was not informed until he attempted to save the document. With this version this bug is fixed showing the following behavior: If the file is part of the source control, then the user will be prompted to check out the file, otherwise he will be queried whether to remove the write-protection flag or not.
Remedy/workaround	-

JetSym Library as New File

Symptoms	On page "Files" in dialog "New" the file type "JetSym Library" was available for selection even this not a file but a project type. After the user selected this entry neither a file nor a project was created. The user was not informed about his invalid selection whatsoever. From this version onwards the entry "JetSym Library" is not available on the "Files" page anymore.
Remedy/workaround	-

New File over Context Menu in Project Tree

Symptoms	If a new file was created using the command in the project tree's context menu, then dialog "New" offered besides the page for the correct file type the page "Other Documents" for selection.
Remedy/workaround	-

Program Crash after Closing a Workspace

Symptoms	A workspace had been closed and the prompt message, if all documents should be closed as well had been answered with "No". Certain operations like closing a file could then cause a program crash.
Remedy/workaround	Wenn möglich beim Schließen eines Projektes alle damit verbundenen Dokumente ebenfalls schließen lassen.

Multiple Entries after Hardware Scan

Symptoms	A double click on button "Scan" in dialog "Hardware Scan" caused multiple entries of the hardware found by the scan. The JetSym program crashed in rare cases. This bug is now fixed.
Remedy/workaround	-

Renaming Identifier in Write-Protected Files

Symptoms	If an identifier was renamed in several files, then no alterations were done in the write-protected ones among them without informing the user. This had the effect that the resulted program could not be compiled anymore. From this version onwards the operation is performed the same way as described in chapter 2.16.
Remedy/workaround	-

Changing Non-Localized String Variables over CAN

Symptoms	Non-Localized string variable values could not be changed in the setup and in the monitor window if the communication was done over CAN interface.
Remedy/workaround	-

Online Recognition of Operating System

Symptoms	If a program was download during variables were monitored in the setup as well as in the monitor window, then a message box appeared telling that the online recognition of the controller's operating system did not work; even the controller was definitely online. This bug is fixed from Version 5.1.2 onwards.
Remedy/workaround	-

Check-In of newly created Files in TFS

Symptoms	Up to this version files created by executing command "New" could not be checked-in to the Team Foundation Server.
Remedy/workaround	-

Renaming Identifiers in Tasks without "Autorun"

Symptoms	Identifiers located in a task without the keyword "autorun" were overlooked completely when trying to rename them. From this version onwards they will be renamed as well.
Remedy/workaround	-

Incorrect Text in Dialog "Find in Files"

Symptoms	In the combo box "Look in" inside the dialog "Find in Files" the incorrect entry "All Projects" is now replaced by the correct one ("Entire Workspace").
Remedy/workaround	-

Optimization of Program Download

Symptoms	By parallelizing some of the operations the program download could be optimized with the result that it does not take a very long time for the download anymore (> 60 sec), if there several JX3-BN-ETH modules are placed in the hardware definition, but which all are not online.
Remedy/workaround	-

Flags in Compatible Mode (Oscilloscope)

Symptoms	In oscilloscope documents it was possible to define flags to be recorded in compatible mode even this is not allowed. From this version onwards it will now be prevented and an error message is shown.
Remedy/workaround	-

Program Crash during "Find and Replace"

Symptoms	If operation "Find and Replace" was started while a "Find" one was still in progress, then JetSym versions before 5.1.2 crashed.
Remedy/workaround	-

Settings in Dialog "Find in Files"

Symptoms	The settings made in dialog "Find in Files" were saved, if the search was started. But nothing was saved if the dialog was closed by clicking on button "Close". From this version onwards, the settings will be also saved when closing the dialog over button "Close", but not if it is closed by pressing ESC-key or clicking on the cancel button in the top-right corner.
Remedy/workaround	-

Copy/Paste in Declaration File

Symptoms	Copying data of a declaration file into the clipboard and then pasting it in another was just possible within one JetSym program instance. From this version onwards the data can also be pasted in a declaration file opened in another JetSym program instance.
Remedy/workaround	-

Wrong Unit at Command "MotionReadValue"

Symptoms	In the Motion Wizard used to define the motion command "MotionReadValue" the unit for the speed value was "°/s" instead of the correct one: "rpm".
Remedy/workaround	-

Program Crash during Size Change of Oscilloscope Window

Symptoms	The JetSym program cashed occasionally, if the window size of an oscilloscope document was changed during data recording. Now the window size can be altered at any time.
Remedy/workaround	-

No Controller Restart Possible

Symptoms	On page "Advanced Configuration" in window "CPU" it was not possible to restart the controller by clicking on the namesake button if the controller type had been changed beforehand. The user was informed over a message box, that the controller was offline even this was definitely not the case. From this version onwards the restart is performed correctly.
Remedy/workaround	-

No Comment in Tooltip

Symptoms	A comment written behind a structure element should be displayed in the tooltip the same way this is done with standard variables. Using JetSym version 5.1 or 5.1.2 this did not work after an Intellisense update initialized either manually or automatically. A call to command "Rebuild All" was necessary to get the result expected.
Remedy/workaround	-

No Active Project after Conversion from ST to STX

Symptoms	There was no project active anymore after the active project had been converted from JetSym ST to JetSym STX. The conversion from STX Motion Wizard to STX Motion API had the same effect. Both bugs are now fixed.
Remedy/workaround	-

Program Crash after Changing the Hardware Configuration

Symptoms	After making changes to the hardware configuration by altering the controller type or by adding/removing motors the JetSym program could crash right after the setup was switched between online and offline several times.
Remedy/workaround	-

Incorrect Conversion from JetSym to ST

Symptoms	During the conversion of a project from JetSym to ST a "JX2-AI4" module defined in the hardware configuration was removed by mistake. From this version onwards it will not be removed anymore.
Remedy/workaround	-

Display of a Negative Number in Setup Window

Symptoms	In a setup window containing task-local variables the cursor was placed in the top-most cell in column "Number" after a project build. Moving the cursor downwards in the same column going over the rows displaying the task-local variables the cell in the "Number" columns contained a negative number. This was actually an offset value which should not be visible at all.
Remedy/workaround	-

Hang-Up at Intellisense Update

Symptoms	JetSym hung-up during an Intellisense update if a task was not terminated by an "end_task;" command. From this version the Intellisense update runs perfectly even under the condition described above.
Remedy/workaround	-

Truncated Text in "CPU" Window

Symptoms	On page "Diagnostic/Errors/General" of the "CPU" window some texts displayed in the combo-box shown in row "Global Error", column "Content" were truncated on the right side. The window has been enlarged to show the full text.
Remedy/workaround	-

Display of Boolean Values in Setup Window

Symptoms	In the setup window Boolean values are displayed with the digits "0" and "1". New values can be written by entering "0" and "1" as well. On the opposite side the monitor window shows the status of Boolean values with the texts "true" and "false" and new values can be written by entering texts "0", "1", "true" and "false". From this version onwards the setup shows and accepts Boolean values the same way as the Monitor window does.
Remedy/workaround	-

Number Display Type in Setup Window

Symptoms	If the number display type of a structure's element was changed between decimal, hexadecimal and binary followed by a collapsing and re-enlarging its structure, then the number display type was partially not taken over and the values were still shown in the previously defined one.
Remedy/workaround	-

More User-Friendly "CPU" Window

Symptoms	The ease of use in the diagnostic part of the "CPU" window is now increased, so that the number of mouse-clicks necessary to open combo-boxes located in this window is reduced.
Remedy/workaround	-

Selection at Auto-Completion

Symptoms	The selection window used for the auto-completion (Intellisense) was opened directly and not by entering some text. Under these circumstances the procedure to fill in the entries completely overlooked the beginning characters of the word already entered and did not reduce the selection accordingly.
Remedy/workaround	-

Type Selection at Register Addresses in Oscilloscope Window

Symptoms	After entering a register number to be recorded within an oscilloscope document it is possible to set the type to a different value than "auto", but without showing any effect. From now on the type selection will be taken over properly.
Remedy/workaround	-

Trouble with Protected Functions in Classes

Symptoms	A class named "class3" is derived from "class2" which again is derived from "class1". In "class1" there is a virtual function defined which is overridden in "class3", but not in "class2". If the override function in "class3" called its base class function, then the compiler aborted with the error message that a protected function cannot be accessed. This is wrong and now corrected.
Remedy/workaround	-

Too short Recording in Oscilloscope Profiler

Symptoms	If the number of data points to be recorded by the oscilloscope profiler was defined to less than 10000, then the sampling did not record all 10000 as expected. If the number was set to more than 10000, then random values have been added for the data points behind the 10000th one. From this version onwards despite the number of data points defined there will be 10000 values evaluated and the scaling is done correctly. Besides this a few troubles concerning the user operation were mended.
Remedy/workaround	-

Hexadecimal Display of Enumeration Values

Symptoms	In program editor's tooltips enumeration values are now displayed in both formats hexadecimal as well as decimal.
Remedy/workaround	-

Compatibility of String Variables

Symptoms	From now on string variables defined with type "string" and localized with "%vl" are treated by the compiler as Jetter strings ("regstring"). This new behavior ensures a better compatibility with previous controller operating systems. Therefore this as well as future JetSym versions can be used with controllers having an older operating system.
Remedy/workaround	-

Takeover of Pub/Sub-Variables

Symptoms In the hardware manager a hardware module, which some of its parameters had already been published (Pub/Sub-Variables), was moved from one JX3-BN-ETH to another one. In previous versions the entries in the Pub/Sub-table were not adjusted correctly after performing this operation. If the entry was removed from the hardware manager instead of moving it, then an exception error occurred.

Remedy/workaround -

Special Characters in Comments in Setup Window

Symptoms In column "Name" within a setup window it is possible to enter a comment by preceding it with a double-slash ("//"). If this comment contained special characters like an umlaut or a sharp-s, then these characters were not saved and got lost as soon as the setup document was closed.

Remedy/workaround -

Program Crash after Canceling a Transfer

Symptoms The program JetSym could crash right after canceling a transfer (program, OS update, data dump).

Remedy/workaround -

Misbehavior with Expression "[export jde]"

Symptoms The compilation was aborted with an error in case "jde" was not written in lower case.

Remedy/workaround -

Bug in English Online Help

Symptoms	In the English online help the index entry "Know open issues" was not available while the synonym entry "Liste offener Punkte" is available in the German online help.
Remedy/workaround	-

No Validation of Timeout Entry in CPU Window

Symptoms	Even timeout values are limited to be within range 10 milliseconds to 30 seconds, no validation was performed after a user entry in the CPU window.
Remedy/workaround	-

Misbehavior in Oscilloscope Window

Symptoms	After adjusting the windows font size to 125% the radio buttons used for the channel scaling in the oscilloscope window could not be operated anymore.
Remedy/workaround	-

Display of Time Members within a Structure Array

Symptoms	Neither in a setup nor in a monitor window the remaining time of a time member within a structure array was displayed.
Remedy/workaround	-

No Support of Expanded Semaphores in JetSTX-VM

Symptoms	The emulator controller "JetSTX-VM" did not support expanded semaphores.
Remedy/workaround	-

Copying/Moving Axes

Symptoms	Axes could contain false data after they were copied or moved.
Remedy/workaround	-

Unexpected Closing of Configuration Window

Symptoms	After adding or removing a project configuration a press on the ENTER key did close the "Configurations" dialog even the focus was still set on button "Add" respectively on button "Remove".
Remedy/workaround	-

No Compiler Error with Standalone Command "REG"

Symptoms	If command "REG" was located standalone in a JetSym program without any assignment or comparison, then no compiler error was generated even this is not valid. By the way the old program "Sympas" running under DOS generates a compiler error under the very same condition.
Remedy/workaround	-

Program Crash during File Transfer

Symptoms	If a file to be transferred to the controller exceeded the file system memory available in the controller, then JetSym crashed. So this also could happen during the download of a JetSym-STX program.
Remedy/workaround	-

Incomplete Tooltip Display

Symptoms	In the tooltip of a variable of previously defined enumeration type did not display the type's name.
Remedy/workaround	-

Bad Operability when Controller Offline

Symptoms	If one or more setup windows were open attempted to communicate with a non-connected controller, then the operability became worse drastically. In some cases program crashes occurred..
Remedy/workaround	-

Incorrect Compiler Error with Empty Optional Parameters

Symptoms	If one or more setup windows were open attempted to communicate with a non-connected controller, then the operability became worse drastically. In some cases program crashes occurred.
Remedy/workaround	-

No STX Variables Value Display

Symptoms	Especially right after the download of a program it could happen, that monitored STX variables in the setup or monitor window did not display a value, but the text "Invalid TCP/STX protocol parameter".
Remedy/workaround	-

No Focus Change from Setup Window

Symptoms	Under certain circumstances the focus could not be changed from the setup window to another one.
Remedy/workaround	-

No Adjustment of EPROM File Extension

Symptoms	The file extension of the EPROM file was not adjusted when changing the controller type.
Remedy/workaround	-

Incorrect Program Comparison

Symptoms	It the macro to define the number of axis groups is used within the program a program comparison always ended with the message, that the program on the controller differs from the one in the editor, even when the program had just been downloaded.
Remedy/workaround	-

No Adjustment at Change of Structure Array Index

Symptoms	If the index of a structure array monitored in a setup window was incremented or decremented by the +/- keys the index change only took effect in the root element, but not in the other ones.
Remedy/workaround	-

Hidden Control Elements in "Compare & Download"

Symptoms	If dialog window "Compare & Download" was maximized, some of its control elements were hidden by the task bar.
Remedy/workaround	-

Incorrect Register Display in Motion Setup

Symptoms	An incorrect register was displayed in the Tooltip inside the motion setup as soon as the mouse was moved over one of the six LEDs located left of the enable button.
Remedy/workaround	-

Program Crash at Selection of Data Dump File

Symptoms	JetSym program crashed under Windows XP at the selection of a data dump file during the first data transfer launched right after the first installation of JetSym on a PC system.
Remedy/workaround	-

Program Crash at Insertion of Motion Command "MotionCamDefine"

Symptoms	JetSym could crash at the insertion of the motion command "MotionCamDefine" using Motion Wizard.
Remedy/workaround	-

Project Folder Cannot Be Deleted

Symptoms	A workspace was opened by a double click on the workspace file in the Windows Explorer. Then the workspace was closed using command "Close Workspace". After these operations the project folder could mistakenly not be deleted.
Remedy/workaround	-

Index Value Change within a Structure Array in a Setup Window

Symptoms	A structure array was displayed in a setup window showing all branches (enhanced mode). Any change made to the array index of the root element by using the keys "+" and "-" did not affect the other structure members.
Remedy/workaround	Collapse the structure and re-expand it. Then all structure members are displayed with the correct index values again.

Maximizing Dialog "Compare & Download"

Symptoms	After maximizing dialog window "Compare & Download" some of the control elements were hidden behind the task bar.
Remedy/workaround	Avoid maximizing this dialog. Adjust the dialog's window size manually instead. This size will be re-used until the termination of JetSym.

Project Folder Cannot Be Deleted

Symptoms	A workspace was opened by a double click on the workspace file in the Windows Explorer. Then the workspace was closed using command "Close Workspace". After these operations the project folder could mistakenly not be deleted inside the Windows Explorer.
Remedy/workaround	-

Bug at Conversion of a JetSym ST Project to JetSym STX

Symptoms	At the conversion of a JetSym ST project to a JetSym STX one inside a "case" statement the keyword "break" could be inserted at an incorrect location, if there were nested "if..then..else..endif" statements. Additionally a commented Motion Wizard command was converted correctly but if the conversion made two program lines out of one just the first line remained commented. The second line changed to be uncommented one, which then caused a compiler error.
Remedy/workaround	-

Active Trace after Changing to a JetSym or JetSym ST Project

Symptoms	Inside a workspace containing different project types (JetSym, JetSym ST, JetSym STX) with a JetSym STX project was selected to be the active one and the tracing function was activated. The change of the active project to a JetSym or JetSym ST one did not deactivate the tracing, even these project types do not support this functionality. Additionally the tracing could then not be deactivated anymore until the active project was changed back to a JetSym STX one.
Remedy/workaround	-

Program Crash when Opening or Updating a Tooltip

Symptoms	JetSym program could crash as soon as a tooltip was opened or its content was opened, if the text length exceeded 80 characters.
Remedy/workaround	-

Incorrect Value Display of Variables having Type "char"

Symptoms	In the setup as well as in the monitor window variables of type "char" displayed in case of special characters like the German umlaut ('ä', 'ö', 'ü') the correct numeric value, but the wrong character. Additionally it was not possible to enter a special character directly.
Remedy/workaround	Special characters can be altered by entering the corresponding numeric value.

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