



## JetSym

Version Update from V. 5.2.0 to V. 5.2.1

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## **Table of contents**

1	Introduction	4
2	New features	6
2.1	JC-350: Ethernet axes are supported	
2.2	Improved feedback when debugging	6
2.3	Stop and restart of Publisher/Subscriber communication	6
2.4	Default file name in Motion Setup file dialog	
2.5	Simplified Publisher/Subscriber configuration for JX3-COM modules	
2.6	Publisher/Subscriber configuration for Ethernet modules revised	
2.7	Cyclic determination of task status for task-local variables in setup	
2.8 2.9	STX-VM: New option "Reset file system"  New controller models: JC-365 and JC-365MC	
2.10	New peripheral module supported: JX3-COM-PND	
3	Fixed software bugs	9
	Files are copied to wrong directories by program converter	9
	Following selection and indention of code lines the cursor moves to wrong positions	9
	Task is not displayed in the code navigation of the program editor	
	During Build/Download the monitor displays online values	
	In creating new library projects, a wrong extension is assigned to the output file	
	Motion Setup: Although the parameters are correct, an error message appears	
	String variables are incorrectly displayed when setting up ST projects	
	Rated current of the motor in R618 is accepted	
	JetSym to ST converter	
	Incorrect tooltip info for bit variables following IntelliSense update	12
	Position of dialogs outside the visible area	
	Incorrect assignment of tasks in Setup following a Build	
	IntelliSense does not always correctly detect constructors with parameters	
	Exception error when selecting an axis group in Oszi Motion Wizard	13
	Comparing and downloading: It may happen that files in the root directory of the controller	
	be found	
	Missing overlaps in map file	
	Serial interface - communcation problems	
	Rearrangement of Ethernet axes causes changes in GNNs	
	Two axis configuration panes for the same axis  The actual current is not displayed in Motion Setup	
	Program crashes when context-sensitive help is opened in an oscilloscope file	
	Crash when navigating in the dialog "Project settings"	15 15
	Crash when selecting colors in oscilloscope mode	15
	After changes in the Publisher/Subscriber configuration pane the focus freezes	
	When switching between projects in the "Project settings" dialog, paths are not updated .	
	Problems when loading incomplete projects which have been created in older JetSym ve	
	JetSym fails to mark a path group as invalid if too many axes are involved	
	Monitor is very slow in the case of large data structures	
	Compiler directive #warning fails to issue a warning	17
	Changes made to comments of arrays or structs in the setup window	1/

## 1 Introduction

## Overview Version 5.2.1

The following table gives an overview of newly added or enhanced features and fixed software bugs:

Function	New	Added	Fixed
JC-350: Ethernet axes are supported	✓		
Improved feedback when debugging	✓		
Stop and restart of Publisher/Subscriber communication	✓		
Default file name in Motion Setup file dialog	✓		
Simplified Publisher/Subscriber configuration for JX3-COM modules	✓		
Publisher/Subscriber configuration for Ethernet modules revised	✓		
Cyclic determination of task status for task-local variables in setup	✓		
STX-VM: New option "Reset file system"	✓		
New controller models: JC-365 and JC-365MC	✓		
New peripheral module supported: JX3-COM-PND	✓		
Files are copied to wrong directories by program converter			✓
Following selection and indention of code lines the cursor moves to wrong positions			✓
Task is not displayed in the code navigation of the program editor			✓
During Build/Download the monitor displays online values			✓
In creating new library projects, a wrong extension is assigned to the output file.			✓
Motion Setup: Although the parameters are correct, an error message appears			✓
String variables are incorrectly displayed when setting up ST projects			✓
Rated current of the motor in R618 is accepted			✓
Motion Setup: Buttons remain grayed out			✓
JetSym to ST converter			✓
Incorrect tooltip info for bit variables following IntelliSense update			✓
Position of dialogs outside the visible area			✓
Incorrect assignment of tasks in Setup following a Build			✓
IntelliSense does not always correctly detect constructors with parameters			✓
Exception error when selecting an axis group in Oszi Motion Wizard			✓
Comparing and downloading: It may happen that files in the root directory of the controller can not be found			✓
Missing overlaps in map file			✓
Serial interface - communcation problems			✓
Rearrangement of Ethernet axes causes changes in GNNs			✓

Function	New	Added	Fixed
Two axis configuration panes for the same axis			✓
The actual current is not displayed in Motion Setup			✓
Program crashes when context-sensitive help is opened in an oscilloscope file			✓
Crash when navigating in the dialog "Project settings"			✓
Crash when selecting colors in oscilloscope mode fixed			✓
After changes in the Publisher/Subscriber configuration pane the focus freezes			✓
When switching between projects in the "Project settings" dialog, paths are not updated			✓
Problems when loading incomplete projects which have been created in older JetSym versions			✓
JetSym fails to mark a path group as invalid if too many axes are involved			✓
Monitor is very slow in the case of large data structures			✓
Compiler directive #warning fails to issue a warning			✓
Changes made to comments of arrays or structs in the setup window			✓

#### 2 New features

Introduction

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

## 2.1 JC-350: Ethernet axes are supported

JC-350 now supports Ethernet axes Hardware Manager now lets you configure Ethernet axes for a JC-350.

## 2.2 Improved feedback when debugging

Debugger

If program execution is continued following a breakpoint, the yellow arrow is removed and the callstack pane cleared.

# 2.3 Stop and restart of Publisher/Subscriber communication

Publisher/Subscribercommunication Two entries have been added to the network node shortcut menu in the hardware tree. These two menu items let you stop or restart the publisher/subscriber communication.

## 2.4 Default file name in Motion Setup file dialog

**Motion Setup (axes)** 

In the dialog for loading, saving and uploading axis parameter files in Motion Setup the file name (<axis name>.da or <axis name>.ini) is now used by default.

# 2.5 Simplified Publisher/Subscriber configuration for JX3-COM modules

Publisher/Subscriber-configuration

The Publisher/Subscriber configuration für JX3-COM modules has completely been revised and allows for easy configuration.

Important note: When loading legacy projects containing configuration data for JX3-COM modules, all publisher/subscriber variables associated with these modules will be deleted. Therefore, the JX3-COM publisher/subscriber variables must again be entered on the configuration page "Process Data" of the corresponding JX3-COM module. If conversion of such a project is aborted, this project is removed from the workspace to be loaded.

# 2.6 Publisher/Subscriber configuration for Ethernet modules revised

Publisher/Subscriber

For Ethernet modules, the column "Create" has been removed as it is not needed.

# 2.7 Cyclic determination of task status for task-local variables in setup

Setup

The option "Automatically resolve rows with errors" has been added to the Properties dialog in setup. This option lets you cyclically determine the task status of task-local variables.

## 2.8 STX-VM: New option "Reset file system"

STX-VM

The option "Reset file system on restart" has been added to the restart function on the STX-VM GUI.

### 2.9 New controller models: JC-365 and JC-365MC

**Hardware Manager** 

For STX projects, the two new controller models JC-365 and JC-365MC can be selected in Hardware Manager.

## 2.10 New peripheral module supported: JX3-COM-PND

**Hardware Manager** 

For STX projects, the new communication module JX3-COM-PND can be selected in Hardware Manager.

### 3 Fixed software bugs

Introduction

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

#### Files are copied to wrong directories by program converter

**Symptoms** 

Files in subdirectories are copied to wrong directories if the main program file in the source project is not located in the project directory. The following converters are affected: JetSym to ST, ST to STX, and Motion Wizard to Motion API.

Remedy/workaround

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## Following selection and indention of code lines the cursor moves to wrong positions

**Symptoms** 

If you use the mouse to select and indent code lines and you use then the arrow key to navigate downwards, the cursor moves to a position other than expected.

Remedy/workaround

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#### Task is not displayed in the code navigation of the program editor

**Symptoms** 

Though the cursor was behind the keyword "task" within a task, the code navigation box did not display a task. This bug affects tasks without additional parameters, such as "autorun".

Remedy/workaround

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#### During Build/Download the monitor displays online values

Symptoms	The tab "Tasks" in the monitor pane displays online values during a
	D 11/D - 11-11-11-11-11-11-11-11-11-11-11-11-1

Build/Download process.

Remedy/workaround

## In creating new library projects, a wrong extension is assigned to the output file.

**Symptoms** In creating new library projects, a wrong extension is assigned to the output file

if the default controller is not an STX controller.

Remedy/workaround -

## Motion Setup: Although the parameters are correct, an error message appears

Symptoms When setting in Motion Setup the current controller parameter "Rated current"

(R618) and "Overload factor" (R619), it may happen that an error message

appears although the parameters are correct.

Remedy/workaround

#### String variables are incorrectly displayed when setting up ST projects

#### **Symptoms**

String variables are incorrectly displayed when setting up ST projects if in the column "Name" of the Setup pane the register number is entered instead of the variable name. Furthermore, there is no option "regstring" in the list box "Type:"

Remedy/workaround

## Rated current of the motor in R618 is accepted

#### **Symptoms**

When you selected in Motion Setup a motor and its rated current exceeded the rated current of the servo amplifier, so far, the overload factor (R619) was limited in the current controller to 2 and the rated current (R618) was limited to the rated current of the servo amplifier. As of this JetSym version, the rated motor current value in R618 is accepted (provided that it does not exceed twice the rated current of the servo amplifier). The overload factor (R619) is adjusted accordingly.

Remedy/workaround

Motion Setup: Buttons remain grayed out

**Symptoms** 

Under certain circumstances it may happen that in Motion Setup the buttons for loading, saving and transferring axis parameter files remain grayed out when switching to online mode.

Remedy/workaround

### JetSym to ST converter

**Symptoms** 

Several improvements of the conversion from JetSym to ST.

Remedy/workaround

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### Incorrect tooltip info for bit variables following IntelliSense update

Symptoms	Following an IntelliSense update, the tooltip info for bit variables is incorrect.
Remedy/workaround	-

## Position of dialogs outside the visible area

Symptoms	When a monitor has been replaced, it may happen that certain dialogs are displayed on their old position, that is outside the visible area of the new monitor.
Remedy/workaround	-

## Incorrect assignment of tasks in Setup following a Build

Symptoms	Adding or removing tasks followed by a simple build process may result in an incorrect assignment of tasks in the Setup pane. As a result of this error, the contents of task-local variables are incorrectly displayed in the Setup pane.
Remedy/workaround	Add or remove tasks. Then rebuild the project using the command "Rebuild all" and transfer the program to the controller.

#### IntelliSense does not always correctly detect constructors with parameters

Symptoms	Constructors with parameters may abort the update process of IntelliSense information and, thus, may render it incomplete.
Remedy/workaround	-

#### Exception error when selecting an axis group in Oszi Motion Wizard

**Symptoms** Selecting an axis group in Oszi Motion Wizard (in query mode) may result in an

exception error.

Remedy/workaround

## Comparing and downloading: It may happen that files in the root directory of the controller can not be found

**Symptoms** When comparing and downloading configuration files, it may happen that files in

the root directory of the controller can not be found

Remedy/workaround

#### Missing overlaps in map file

**Symptoms** In the map file no overlaps are output in the %mx, %ix, and %qx area.

Remedy/workaround -

#### **Serial interface - communcation problems**

**Symptoms** If for serial communication an interface other than COM1 is used,

communication problems may occur (e.g. no program download possible,

Setup message in online mode "Controller offline", etc.)

Remedy/workaround

### Rearrangement of Ethernet axes causes changes in GNNs

Symptoms	If Ethernet axes are rearranged (e.g. via Drag&Drop), new GNNs are assigned.
Remedy/workaround	-

## Two axis configuration panes for the same axis

Symptoms	In certain cases it could happen that two axis configuration panes were opened for the same axis.
Remedy/workaround	-

## The actual current is not displayed in Motion Setup

Symptoms	In Motion Setup for MC axes, the actual current is not displayed on the pages "Point-to-point" and "Reversing".
Remedy/workaround	-

## Program crashes when context-sensitive help is opened in an oscilloscope file

**Symptoms** Opening the context-sensitive help in a newly created osci file could cause

JetSym to crash.

Remedy/workaround

#### Crash when navigating in the dialog "Project settings"

Symptoms Switching between the tabs "Includes" and "Compiler" in the "Project settings"

dialog under Windows 8 could cause the program to crash.

Remedy/workaround

#### Crash when selecting colors in oscilloscope mode

**Symptoms** Selecting a color for an osci channel under certain circumstances could cause

the program to crash.

Remedy/workaround

## After changes in the Publisher/Subscriber configuration pane the focus freezes

Symptoms When changes have been made to the variable type in the publisher/subscriber

configuration pane, it could happen that the focus freezes and, therefore, blocks

other user actions.

**Remedy/workaround** Make your changes to the variable type. Then, close and reopen the

publisher/subscriber configuration pane.

#### When switching between projects in the "Project settings" dialog, paths are not updated

Symptoms	When you switch from one project to another in the dialog "Project settings", JetSym fails to update the paths on the tab "General".
Remedy/workaround	-

### Problems when loading incomplete projects which have been created in older JetSym versions

Symptoms	Loading incomplete projects (missing hardware file) which have been created in older JetSym versions could affect the order of the axes.
Remedy/workaround	-

#### JetSym fails to mark a path group as invalid if too many axes are involved

Symptoms	If the number of axes in a path group exceeds the maximum number for a given kinematic system, JetSym fails to mark this group in the hardware tree as invalid.
Remedy/workaround	-

### Monitor is very slow in the case of large data structures

Symptoms	When large data structures (e.g. a large array) are displayed in the monitor pane, the update rate for values is very slow.
Remedy/workaround	-

## Compiler directive #warning fails to issue a warning

Symptoms	The compiler directive #warning fails to issue a warning in the output pane when compiling the project.
Remedy/workaround	-

## Changes made to comments of arrays or structs in the setup window

Symptoms	Changes made to comments of arrays or structs in the setup get lost, if the array or struct is minimized and expanded again shortly after.
Remedy/workaround	-



Jetter AG Graeterstrasse 2 71642 Ludwigsburg | Germany

Phone +49 7141 2550-0 Fax +49 7141 2550-425 info@jetter.de

www.ietter.de