SEW EURODRIVE

Installation Instructions

MOVISUITE® standard

Installation and Project Adjustment

Edition 03/2019

25973479/EN

Table of contents

1 General information 5
1.1 About this documentation 5
1.2 Content of the documentation 5
1.3 Product names and trademarks 5
1.4 Copyright notice 5

2 Safety notes 6
2.1 Preliminary information 6
2.2 Target group 6
2.3 Designated use 6
2.4 Network security and access protection 6

3 Introduction 7
3.1 Short designations 7
3.2 Content of this documentation 7

4 Installation 8
4.1 Before updating the software 8
4.1.1 Update required 8
4.1.2 No update required 9
4.1.3 Integrating axis modules 10
4.2 Requirements 10
4.2.1 Installation requirements 10
4.2.2 Hardware requirements 10
4.2.3 Requirements on the operating system 11
4.3 Installing the software 11
4.3.1 Preparing the installation 11
4.3.2 Performing the installation 13
4.3.3 Installation failed 13

5 Adjusting an existing MOVISUITE® project 14
5.1 Converting only the engineering software to SP10 15
5.2 Converting all components to SP10 17
5.2.1 Saving the parameter setting of the safety card 17
5.2.2 Firmware update of the MOVI-C® CONTROLLER 21
5.2.3 Updating the inverter firmware 23
5.2.4 Updating MOVIKIT® software modules 24
5.2.5 Restoring the parameter setting of the safety card 39
5.2.6 Updating the IEC project 41
5.3 Controller replacement function 45

6 Overview of version numbers 46
6.1 Engineering software 46
6.2 IEC libraries 46
6.3 MOVIKIT® software modules 46
6.4 MOVI-C® CONTROLLER 47
6.5 MOVIDRIVE® modular 47
6.6 MOVIDRIVE® system 47

25973479/EN – 03/2019

6.7 MOVIDRIVE® technology 47
6.8 MOVI-C® decentralized drive electronics 48
6.9 MOVISAFE® safety cards 48

25973479/EN – 03/2019

1 General information

1.1 About this documentation

The documentation is part of the product and contains important information. The documentation is for everyone who works with this product.

The documentation must be accessible and legible. Make sure that persons responsible for the system and its operation as well as persons who work independently with the software and the connected units of SEW-EURODRIVE have read through the manual carefully and understood it. If you are unclear about any of the information in this documentation or if you require further information, please contact SEW-EURODRIVE.

1.2 Content of the documentation

The descriptions in this documentation apply to the current software/firmware version at the time of publication. When new versions of software/firmware are installed, the descriptions may differ. In this case, contact SEW-EURODRIVE.

1.3 Product names and trademarks

The brands and product names in this documentation are trademarks or registered trademarks of their respective titleholders.

1.4 Copyright notice

© 2019 SEW-EURODRIVE. All rights reserved. Unauthorized reproduction, modification, distribution or any other use of the whole or any part of this documentation is strictly prohibited.

25973479/EN – 03/2019

2 Safety notes

2.1 Preliminary information

The following general safety notes serve the purpose of preventing injury to persons and damage to property. They primarily apply to the use of products described in this documentation. If you use additional components, also observe the relevant warning and safety notes.

2.2 Target group

Any work with the software may only be performed by a specialist with a suitable education. A specialist in this context is someone who has the following qualifications:

- Appropriate instruction
- Knowledge of this documentation and other applicable documentation.
- SEW-EURODRIVE recommends additional training for products that are operated using this software.

2.3 Designated use

The MOVISUITE® engineering software is the operating platform for all MOVI-C® hardware and software components.

2.4 Network security and access protection

A bus system makes it possible to adapt electronic drive technology components to the particulars of the machinery within wide limits. There is a risk that a change of parameters that cannot be detected externally may result in unexpected but not uncontrolled system behavior and may have a negative impact on operational safety, system availability, or data security.

Ensure that unauthorized access is prevented, especially with respect to Ethernet-based networked systems and engineering interfaces.

Use IT-specific safety standards to increase access protection to the ports. For a port overview, refer to the respective technical data of the device in use.

25973479/EN – 03/2019

3 Introduction

3.1 Short designations

The following short designations are used in this documentation:

Type designation	Short designation
MOVISUITE® standard	MOVISUITE®
MOVISUITE® version V2.1.237.0	MOVISUITE® SP10
MOVISUITE® version V2.0.114.100	MOVISUITE® SP9 service pack 1
MOVI-C® CONTROLLER power UHX85A or MOVI-C® CONTROLLER advanced UHX45A or MOVI-C® CONTROLLER standard UHX25A	MOVI-C® CONTROLLER

3.2 Content of this documentation

The documentation in hand enables you to install the engineering software correctly and to adjust existing projects to the latest version of MOVISUITE®.

25973479/EN – 03/2019

4 Installation

4.1 Before updating the software

INFORMATION

When you update to MOVISUITE® SP10, an existing IEC project can only be used with MOVI-C® CONTROLLERs that have a firmware version which is compatible with MOVISUITE® SP10.

INFORMATION

Changes to MOVI-C® devices may only be made with the matching MOVISUITE® version.

For an overview of versions of MOVI-C® devices for MOVISUITE® SP9 service pack 1 and SP10, refer to the chapter "Overview of version numbers" (→ 🗎 46).

4.1.1 Update required

An update to MOVISUITE® SP10 is required in the following cases:

- You want to use MOVI-C® CONTROLLERs that have been delivered by SEW-EURODRIVE after calendar week 11, 2019. The firmware state of these devices must be taken into operation using MOVISUITE® SP10.
- You want to use MOVIDRIVE® technology including the MOVIKIT® software modules Velocity Drive and Positioning Drive.
- You want to use the decentralized MOVI-C® device MOVIGEAR® performance (DFC, DFC-CiA402 or DSI) with the MOVIKIT® software module MOVIKIT® Velocity or Positioning Drive.
- You want to use the latest generation of CS..A safety cards (firmware state 2.05).

  In order to secure the long-term procurement of spare parts, SEW-EURODRIVE recommends to change firmware state 1.05 of safety cards in existing systems to firmware state 2.05.
- You want to use one of the new functions of the new version.

New functions

- Online help

  For the time being available as a mere online help for first parameters of the standard parameter tree. The online help will be expanded and updated permanently. Activation is scheduled for March 23, 2019.
- Versioned management of IEC projects
  - An IEC project created with SP9 can be opened and edited with MOVISUITE® SP10. The firmware state and version control of the software modules is checked when opening the project in SP10. Returning to MOVISUITE® SP9 with the project is basically possible as long as none of the new functions of SP10 is used when working on the project.
  - You can continue to work on an IEC project created with SP9 or a later version using any later version of MOVISUITE® and its IEC Editor without having to convert to new libraries.

25973479/EN – 03/2019

- MOVISUITE® SP10 uses codesys version 3.5 SP13 patch 1. This version supports the multi-core capability of the controllers of SEW-EURODRIVE and is installed without user entries (silent installation).
- Assist CS V2 with the following new functions
  - Expanded parameter tree: Safety functions that are not used are hidden automatically.
  - The latest firmware 2.05 of the CS..A safety cards is supported. This firmware supports PROFIsafe v2.4 & v2.6 (EtherCAT®, data container size: v2.4: 14Byte, v2.6: 28Byte).
  - Login without reading the safety key ID of the device (auto read out)
  - Flashing pattern of LED for locating devices
  - Last entered data are displayed as suggestion when creating a report
  - Notes regarding deviations from default values are displayed
  - Default values can be applied to entire pages
  - Login page is displayed depending on devices
- CAM Editor with the following new functions
  - Can either be opened using the button in the toolbar or using the context menu in the curve explorer.
  - Standard functions (save, cut, copy, paste) can be performed using shortcuts
  - Several curves can be displayed one below the other
  - Curves can be hidden
  - A curve legend can be displayed
  - Speed limits and acceleration limits can be shown or hidden
- New MOVIKIT® software modules Velocity and Positioning for MOVI-C® CONTROLLER with direct fieldbus connection
- IEC Editor with expanded functions
  - CAN Layer 2 Manager for UHX25 and UHX45
  - CoE access during runtime

    Allows for changing parameters such as reference offset and deceleration ramps.
  - EEPROM access

    Write and read access to EEPROM for adjusting the slave configuration (e.g. for valve blocks, IO link gateways → fixed or variable PDOs).
  - PDO upload from the device

    Easy adjustment of the IEC project for slaves configured with variable PDO lengths, such as gateways. Process data assignment of the device can be read.
  - SEW MOVIKIT® utilities expanded by "ChangeInverterUserUnit", "DeviceAdapterOSC71B", and "FileHandler"

4.1.2 No update required

Updating to MOVISUITE® SP10 is not necessarily required in the following cases:

- None of the cases described in chapter "Update required" (→ 🗎 8) apply to you.

25973479/EN – 03/2019

- You use MOVI-C® CONTROLLERs delivered by SEW-EURODRIVE before calendar week 32, 2018 (MOVISUITE® SP8) and do not want to convert your system to MOVISUITE® SP10.
- You use axis modules in already existing systems that have been taken into operation with a MOVISUITE® version V1.1.xxxx.x or V1.2.xxxx.x. Axis modules that were delivered by SEW-EURODRIVE after calendar week 32, 2018 can be used without having to adjust their firmware (downward compatibility). However, you can only use features for your axis modules that are supported by the firmware version of the already existing system.

  Refer to the description of the firmware of safety cards in chapter "Update required" (→ 🗎 8).

4.1.3 Integrating axis modules

Axis modules can only be operated on a MOVI-C® CONTROLLER with the same firmware version or a later one. If the firmware of the axis modules is older than the MOVI-C® CONTROLLER, you will have to update the firmware of the axis modules.

For support in updating the firmware, contact SEW-EURODRIVE Service.

4.2 Requirements

4.2.1 Installation requirements

Before installing MOVISUITE®, observe the following requirements:

- You must have administrator rights for your PC.
- You can install only **one** MOVISUITE® version on your PC.

  Before changing to the latest MOVISUITE® version, read the instructions in chapter "Before updating the software" (→ 🗎 8).
- If a MOVISUITE® version up to V1.1.xxxx.x is installed on your PC, uninstall it. From version V1.1.xxxx.x, the predecessor version is uninstalled automatically when installing MOVISUITE®.

4.2.2 Hardware requirements

Processor	1 GHz 32-bit processor (x86) or 64-bit processor
RAM	At least 4 GB RAM, recommended are 8 GB RAM
Hard disk	7 GB of free memory in total, 4 GB of that on the operating system hard disk for complete installation of MOVISUITE®
Graphics card	2 GB graphics memory
Resolution	The default resolution is full HD resolution. A resolution of 1280 x 800 is appropriate.

25973479/EN – 03/2019

4.2.3 Requirements on the operating system

Operating system	MOVISUITE® is a 32-bit application. The following operating system variants are permitted: • Windows 7 at least SP1 32-bit/64-bit • Windows 8.1 32-bit/64-bit • Windows 10 32-bit/64-bit
Redistributables	The following Microsoft components must also be installed: • Microsoft Windows Installer 3.1 or higher • Microsoft.NET Framework 4.6

4.3 Installing the software

INFORMATION

The installation will only be performed if the IEC Editor version of the installation package (version V3.5.13.1) is not installed on your PC.

INFORMATION

If you have already installed MOVISUITE® on your PC and you have worked with MOVISUITE® or the IEC Editor after having started your PC last time, then start your PC again before installing a new MOVISUITE® version.

MOVISUITE® is installed in several steps:

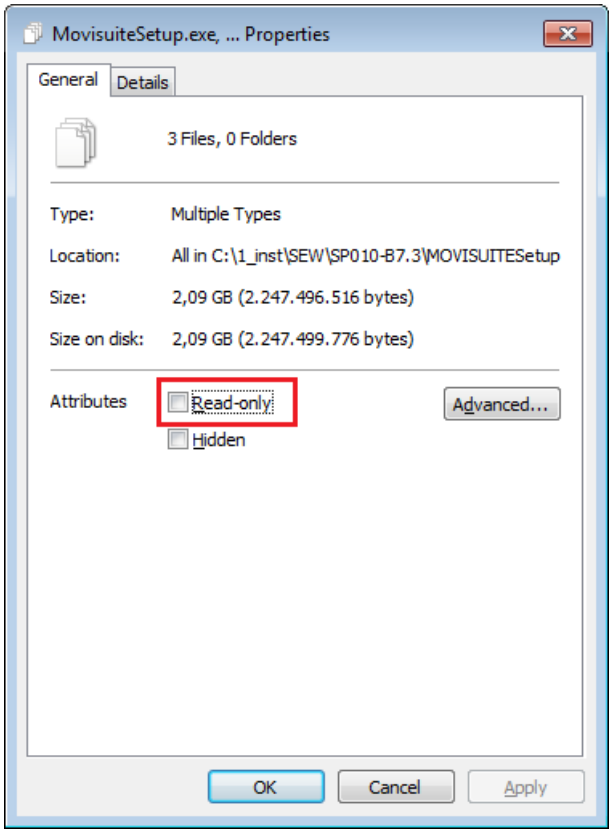
- "Preparing the installation" (→ 🗎 11)
- "Performing the installation" (→ 🗎 13)

4.3.1 Preparing the installation

1. Copy the following installation files to the hard disk of your PC: `movisuite.syspkg`, `MOVISUITE-Licence.txt`, `MovisuiteSetup.exe`.

25973479/EN – 03/2019

2. If the installation files are available on a write protected medium (e.g. on a DVD), then remove the write protection from all 3 installation files. To do so, open the context menu with a right mouse-click and open the properties of the files.
3. On the "General" tab, disable the "Read only" check box.

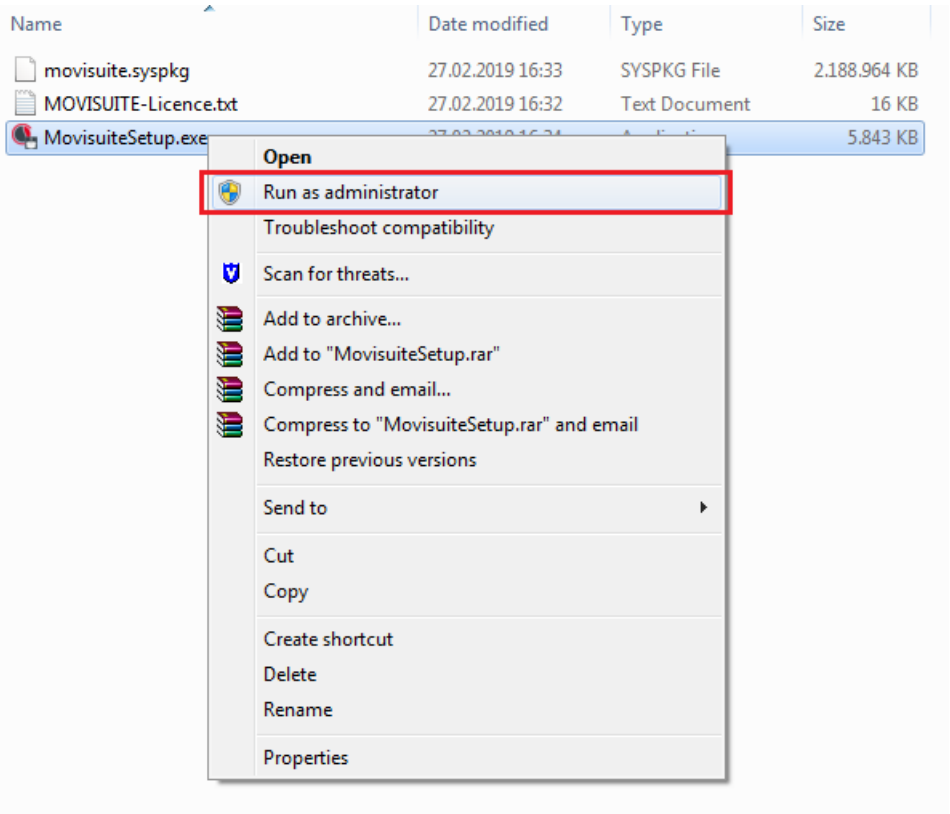


18014422019228043

25973479/EN – 03/2019

4.3.2 Performing the installation

1. Run the "`MovisuiteSetup.exe` installation file "with administrator rights. To do so, right-click the file to open the context menu and select [Run as administrator].



9007222765267467

   ⇨ The software is installed using a wizard.

2. If you are requested to reboot your PC when installing the IEC Editor, it is important that you follow this instruction.

INFORMATION

If you do not reboot your PC, an error will occur when installing the IEC packages. This error can only be eliminated by restarting the PC and installing MOVISUITE® again.

   ⇨ After having rebooted the PC, the wizard continues installing MOVISUITE®.

4.3.3 Installation failed

In rare cases, virus scanners or firewalls can cause problems when installing MOVISUITE®. In this case, refer to the log files of the virus scanner or the firewall for information on possible problems.

5 Adjusting an existing MOVISUITE® project

Adjusting an existing MOVISUITE® project is explained in more detail by way of the following 2 examples:

"Converting only the engineering software to SP10" (→ 🗎 15)

The engineering tasks are performed using MOVISUITE® SP10. However, the following hardware and software components should keep the version state of MOVISUITE® SP9 service pack 1:

- Firmware of the MOVI-C® CONTROLLERs
- Firmware of the safety cards
- All IEC libraries
- All MOVIKIT® software modules

"Converting all components to SP10" (→ 🗎 17)

The engineering tasks are performed using MOVISUITE® SP10. All hardware and software components are also converted to the version state of MOVISUITE® SP10.

In the example, the following device topology is used for both cases:

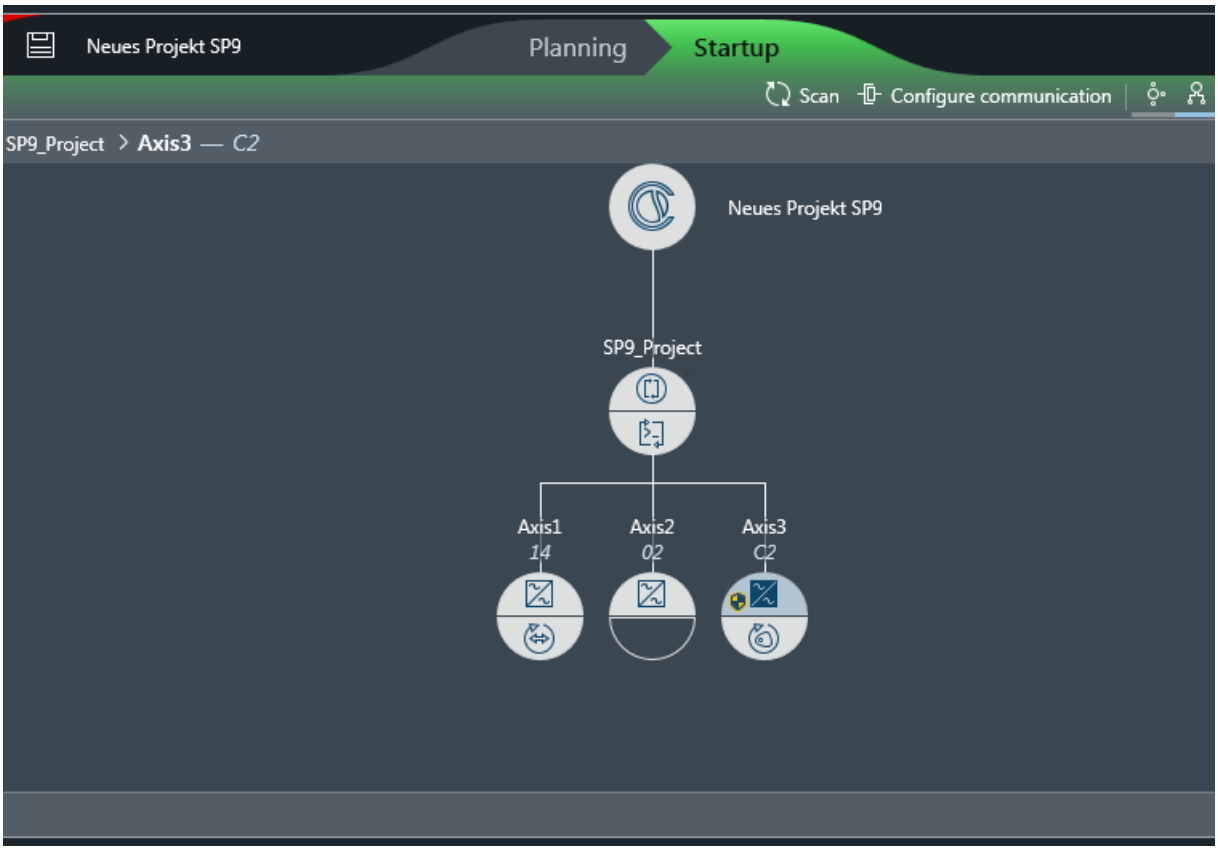
- MOVI-C® CONTROLLER power UHX85A
- MOVIDRIVE® modular application inverter, MDD90A double-axis module. The MOVIKIT® MultiMotion software module is assigned to the first axis.
- MOVIDRIVE® modular application inverter, MDA90A single-axis module with MOVISAFE® CSS21A safety card and assigned MOVIKIT® MultiMotion Camming software module.

An IEC project already exists. A data backup of the existing project, created with MOVISUITE® SP9 service pack 1, is available.

25973479/EN – 03/2019

SEW EURODRIVE

The following figure shows the device topology of the existing project:



9007224510620939

5.1 Converting only the engineering software to SP10

In this case, the firmware of MOVISUITE® SP9 service pack 1 remains installed on the MOVI-C® CONTROLLER power UHX85A, the lower-level axis modules, and the safety cards. Also the IEC libraries and the MOVIKIT® software modules remain at the version state of MOVISUITE® SP9 service pack 1.

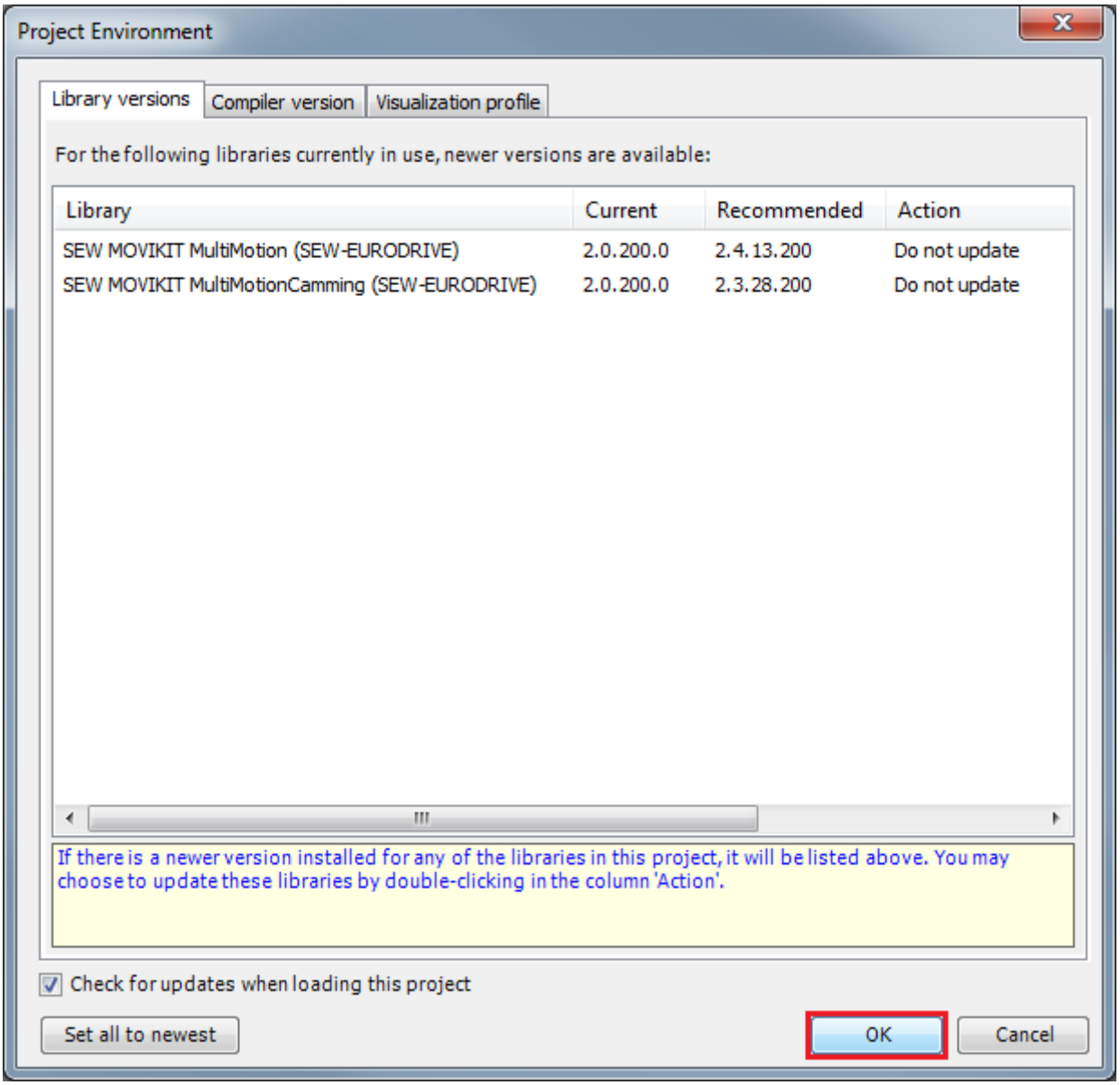
For an overview of versions of MOVI-C® devices for the two MOVISUITE® versions, refer to the chapter "Overview of version numbers" (→ 🗎 46).

Proceed as follows:

1. Install MOVISUITE® SP10 on the engineering PC.
   ⇨ MOVISUITE® SP9 service pack 1 will be uninstalled automatically when installing SP10.
2. Open the project that has been created with MOVISUITE® SP9 service pack 1.

25973479/EN – 03/2019

3. Open the IEC Editor project.
   ⇨ The "Project Environment" window opens.



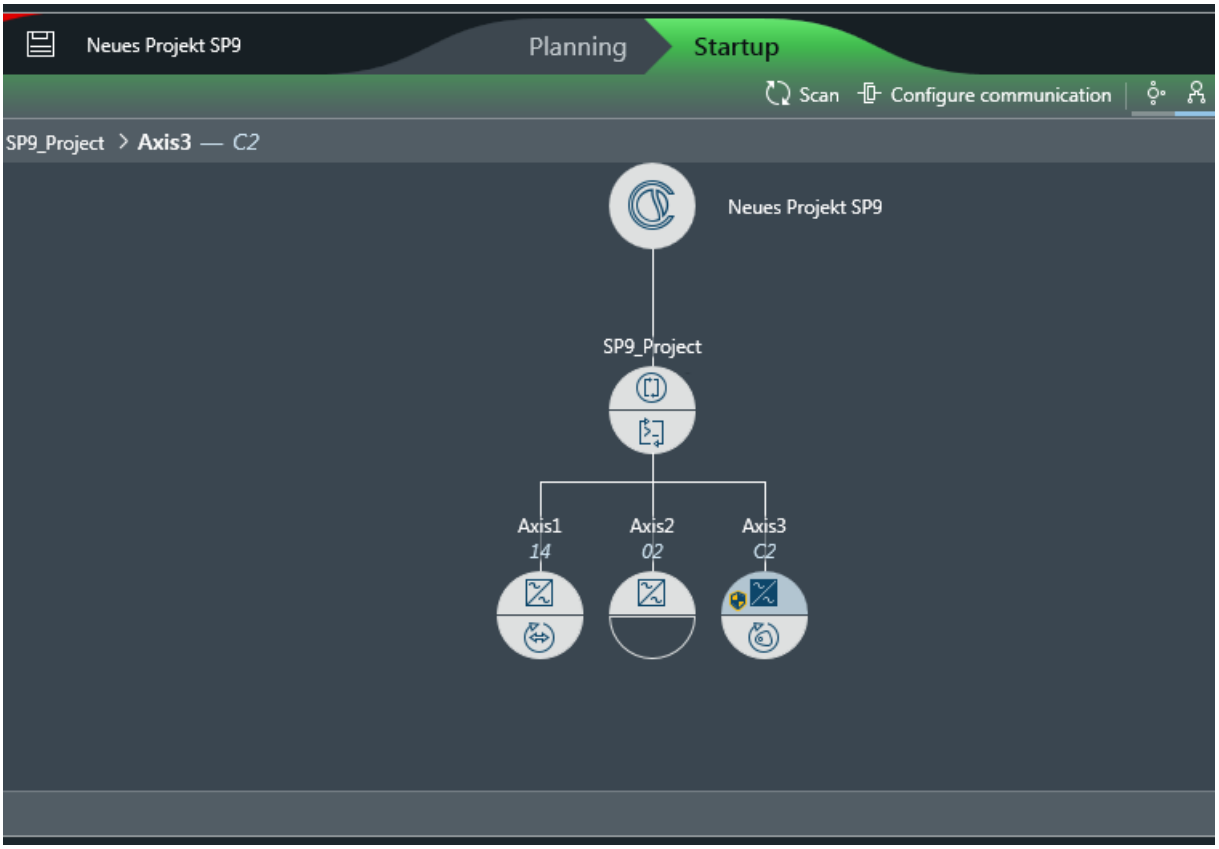
28380324747

4. Do not update them as the IEC libraries are to remain at version state MOVISUITE® SP9 service pack 1.
5. Click [OK].
   ⇨ The functions compile, save, start, and login in the IEC Editor work properly.
6. Create a boot project.
   ⇨ The IEC Editor project is saved on the SD memory card of MOVI-C® CONTROLLER power UHX85A and is still present after restart.
7. Save the project in the IEC Editor.
8. Close the IEC Editor.

25973479/EN – 03/2019

5.2 Converting all components to SP10

1. Install MOVISUITE® SP10 on the engineering PC.
   ⇨ MOVISUITE® SP9 service pack 1 will be uninstalled automatically when installing SP10.
2. Open the project that has been created with MOVISUITE® SP9 service pack 1.
   ⇨ The following figure shows the device topology of the existing project.

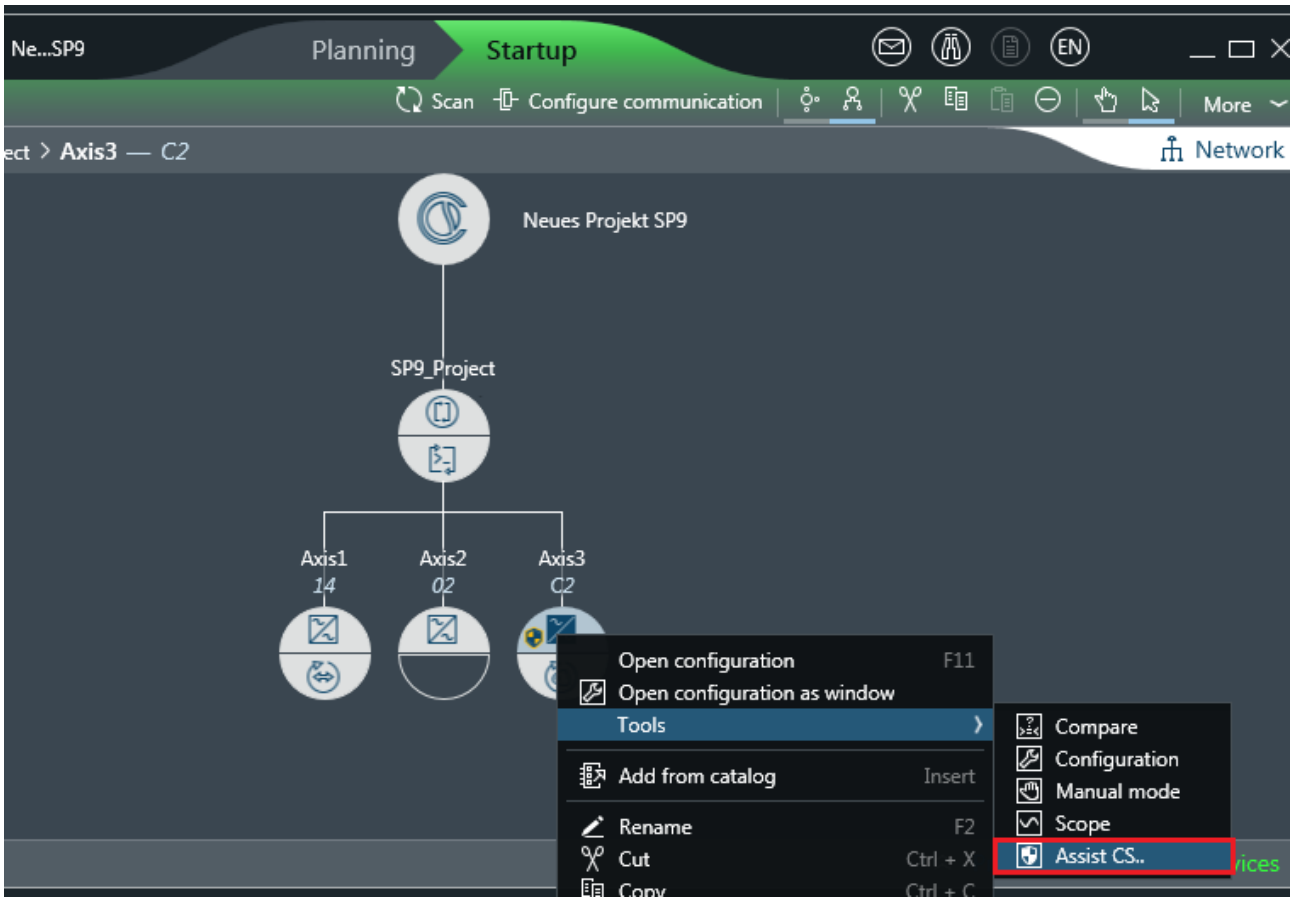


9007224510620939

5.2.1 Saving the parameter setting of the safety card

1. Right click to open the context menu of the axis with the integrated safety card.

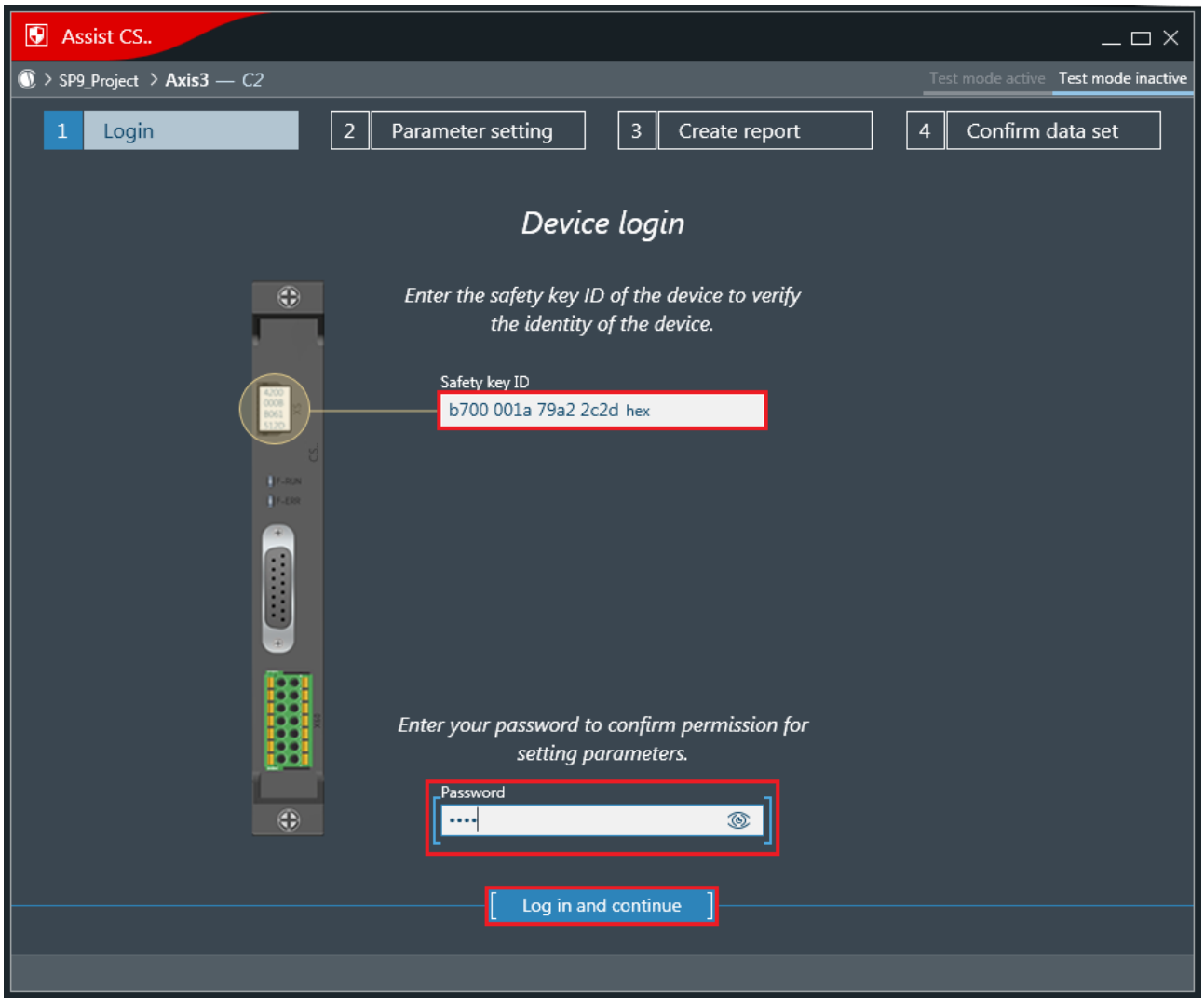
2. Start the "Assist CS.." tool.



28388740875

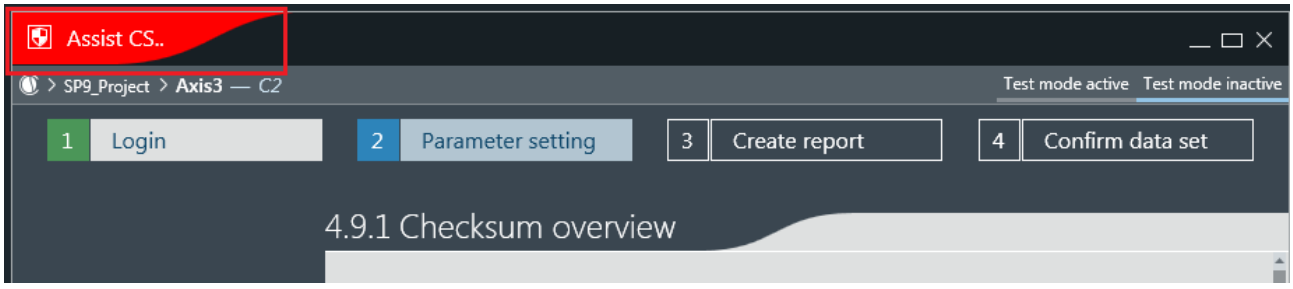
3. Enter the safety key ID and the password.

4. Click the [Log in and continue] button.



28388745483

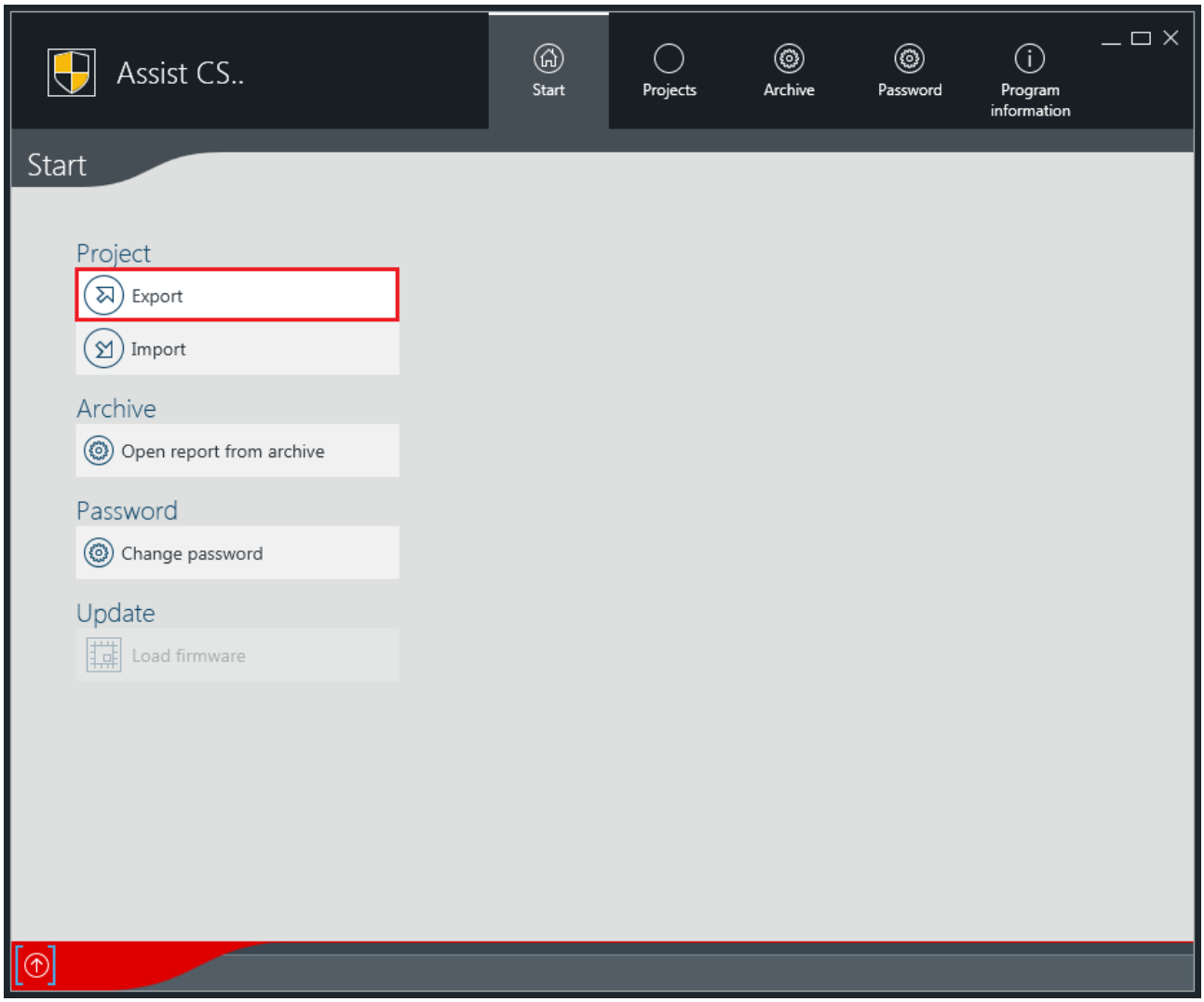
5. Click the red tab "Assist CS..".



28535023627

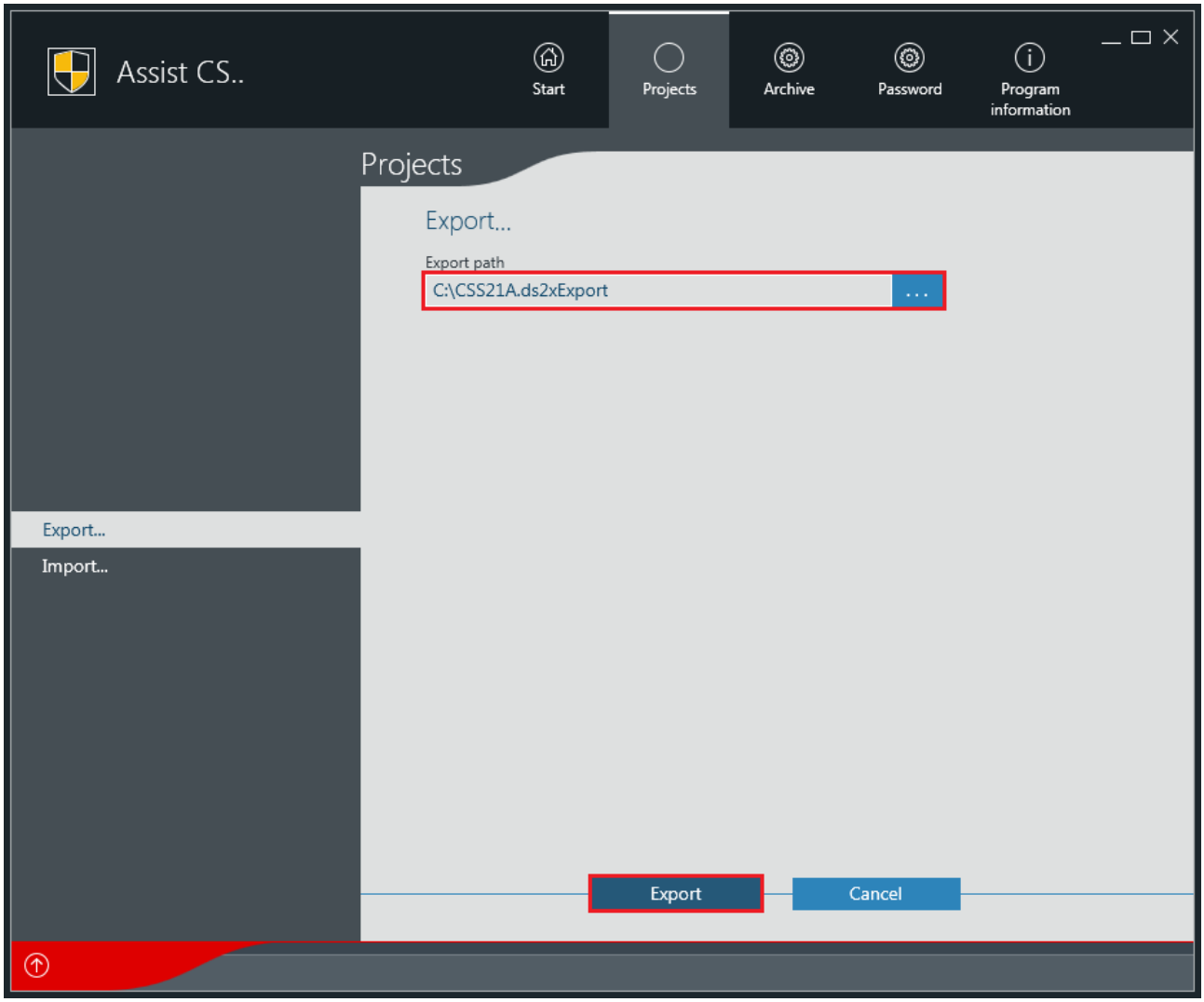
⇨ The main menu of the "Assist CS.." tool is displayed.

6. Click [Export].



28535028235

⇨ The export window opens.



28389850891

7. Click the [...] button.
8. Select the export path.
9. Click [Export].
   ⇨ The data set is written to the storage location you have specified in the export path.
10. Confirm the message that export is completed.

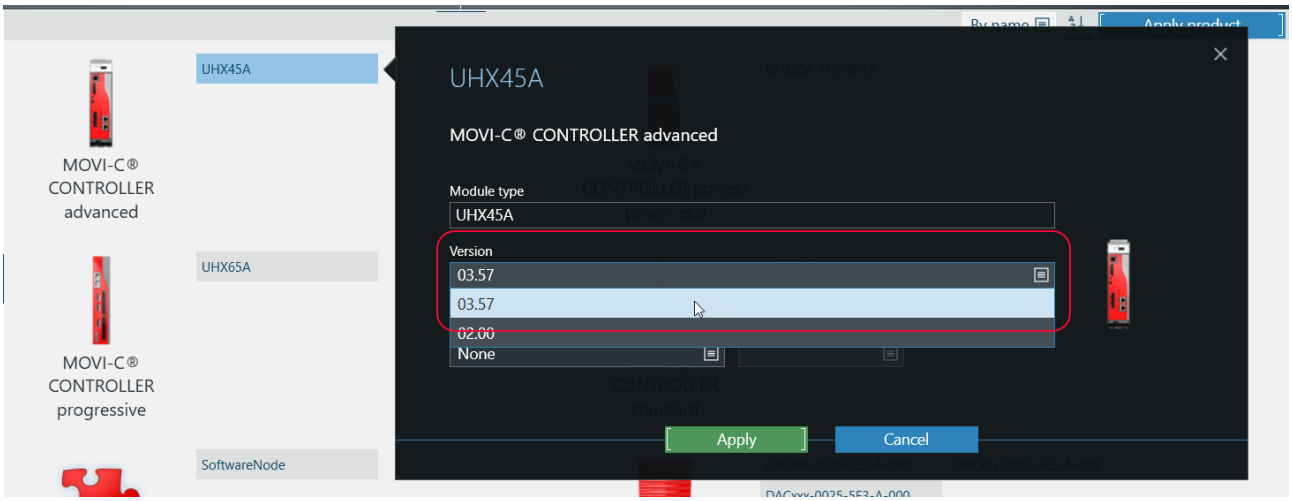
⇨ You have successfully exported the parameter setting to the safety card. To restore the parameter setting, you can use the export file.

5.2.2 Firmware update of the MOVI-C® CONTROLLER

Exporting a firmware image

1. Click the red "MOVISUITE®" tab.
2. Under "New project", click [Planning].
   ⇨ A new, empty project is created in MOVISUITE®.
3. Add the required MOVI-C® CONTROLLER.

4. Select the latest version of the controller from the catalog.

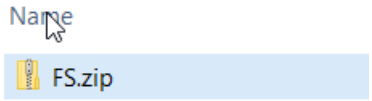


28535045643

5. From the menu, select [Functions] > [Data management] > [Export firmware].

28535048587

6. Click [Firmware export].
   ⇨ The "Search folder" window opens.
7. Select a target folder.
8. Click [OK].



28535053963

⇨ You find the ZIP file "FS.zip" in the export directory.

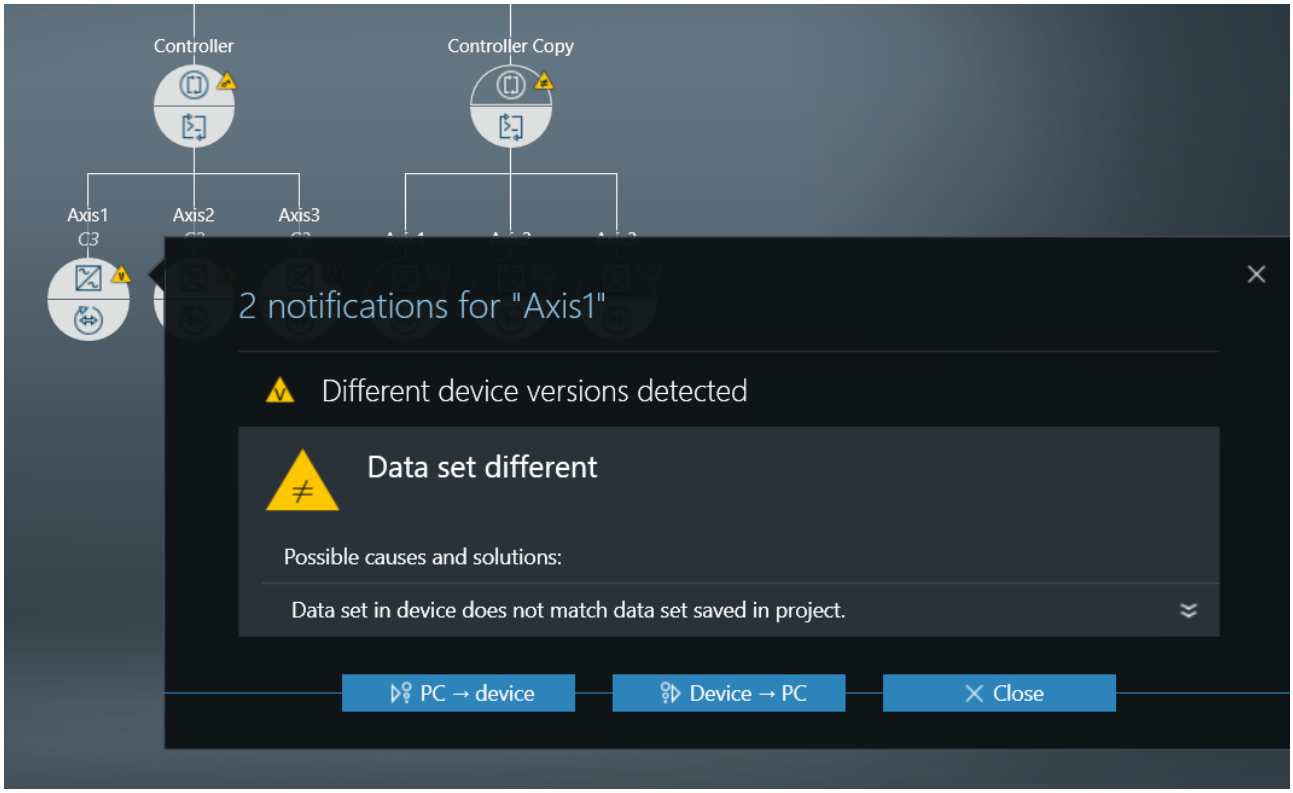
Copying the firmware image to the memory card

INFORMATION

Keep the existing image on the memory card to obtain the settings for automatic device replacement and the license information.

✓ The controller replacement function is enabled. For further information, refer to the chapter "Controller replacement function" (→ 🗎 45).

1. Switch off the MOVI-C® CONTROLLER.
2. Remove the memory card from the MOVI-C® CONTROLLER .
3. Insert the memory card into a memory card reader.
4. Copy the exported firmware image (→ 🗎 21) onto the memory card.
5. Insert the memory card into the MOVI-C® CONTROLLER.
6. Switch on the MOVI-C® CONTROLLER.
   ⇨ You can now see on the controller node in the project that the version has changed.
7. Click the [Device → PC] button.



28535102091

⇨ You have now successfully updated the firmware.

5.2.3 Updating the inverter firmware

For an overview of versions of MOVI- C® devices for the two MOVISUITE® versions, refer to the chapter "Overview of version numbers" (→ 🗎 46).

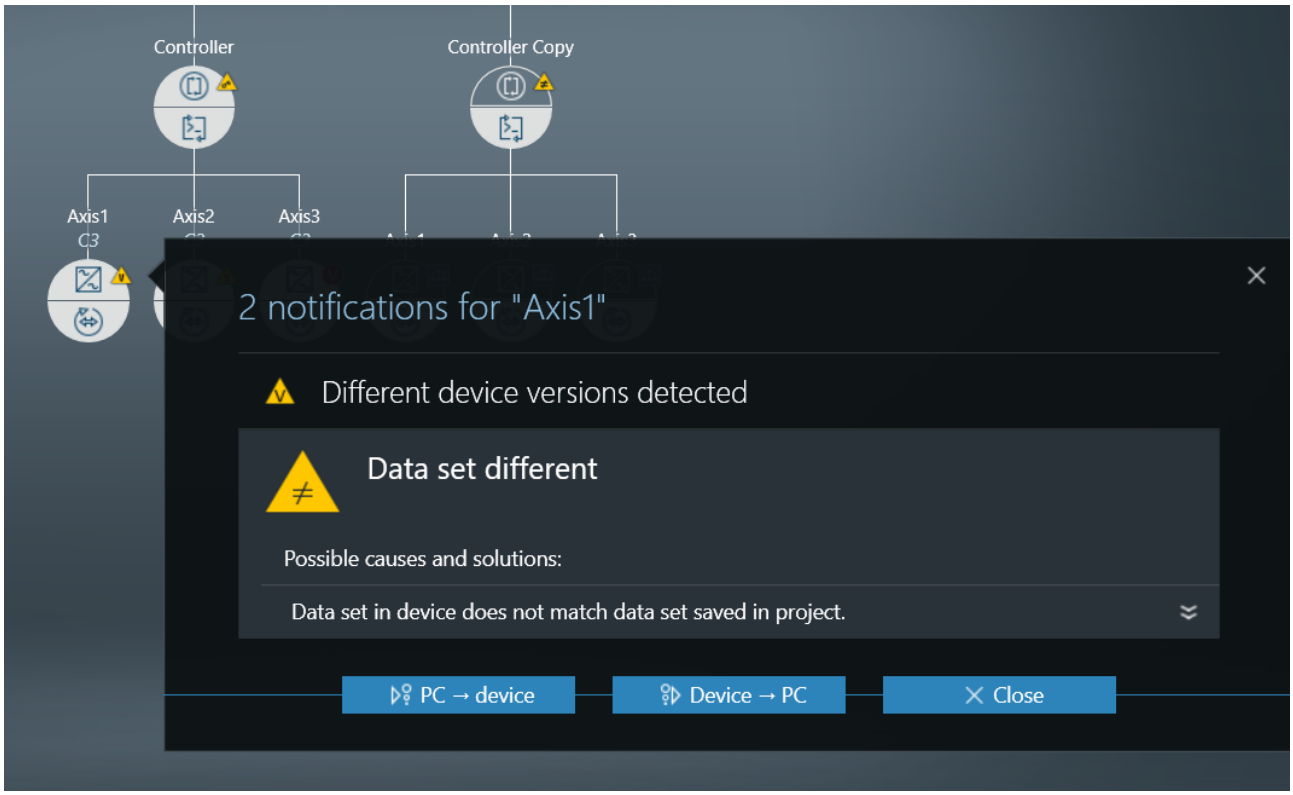
To have the firmware of an inverter updated, contact SEW-EURODRIVE Service.

✓ The MOVI-C® CONTROLLER and the lower-level axis modules have the firmware state of SP10.

✓ The MOVISAFE® safety cards have the firmware state of SP10.

✓ You have adopted the safety keys during replacement of the MOVISAFE® safety cards.

1. Click the yellow warning sign at the node of an inverter.
   ⇨ The notification window of the inverter opens.



28535102091

2. Click the [Device → PC] button.

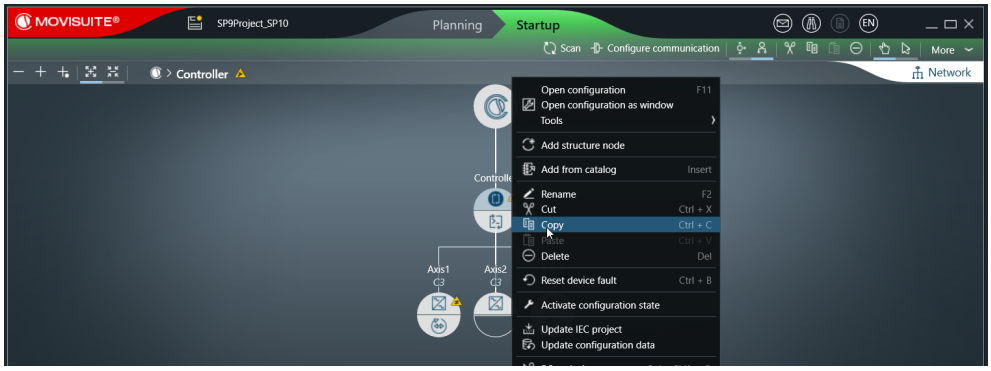
5.2.4 Updating MOVIKIT® software modules

An automatic update function is not available for MOVIKIT® software modules. This means you have to update the MOVIKIT® software modules manually.

MultiMotion

Copying controller nodes

1. Copy the controller node by selecting [Copy] from the context menu.



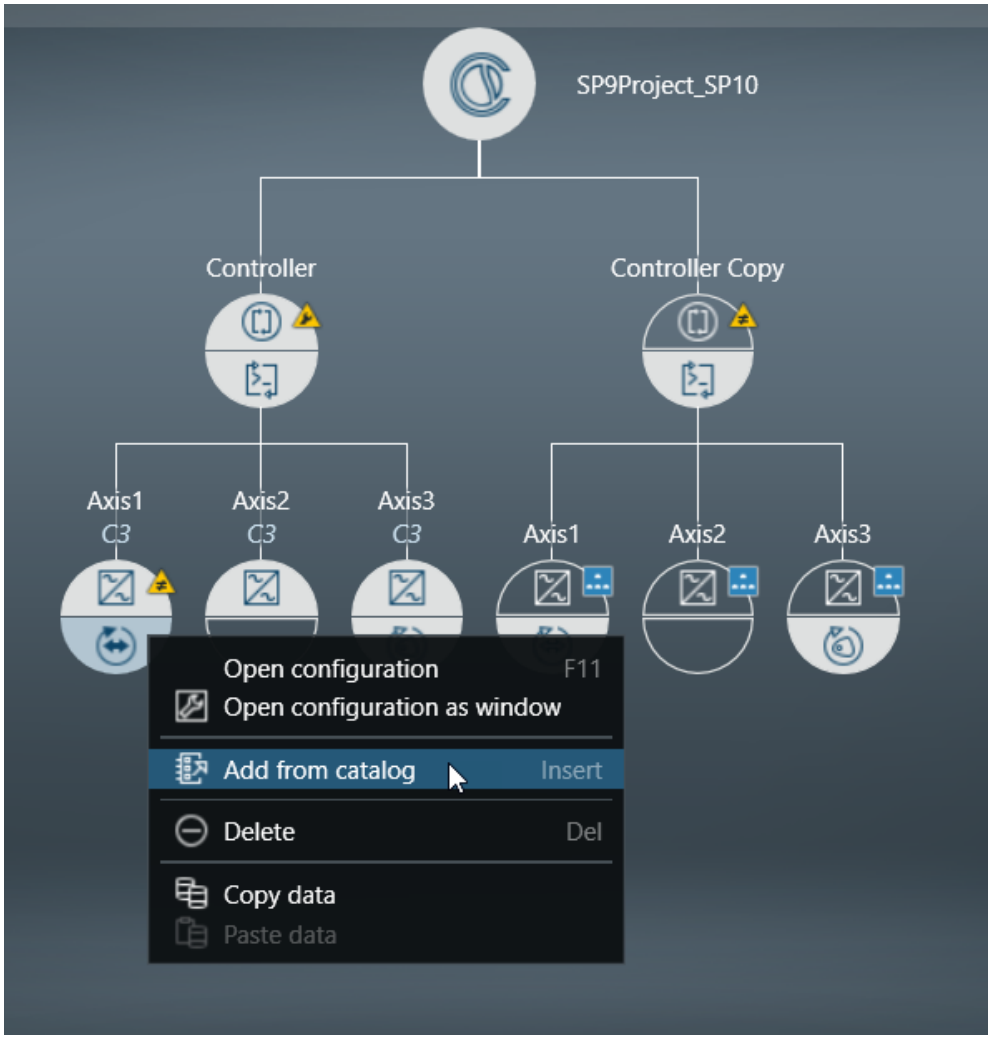
28535185035

2. Insert a copy of the controller node on the project node by selecting [Paste] from the context menu.

28535187467

Updating software modules

1. Click the software module and select [Add from catalog] from the context menu.

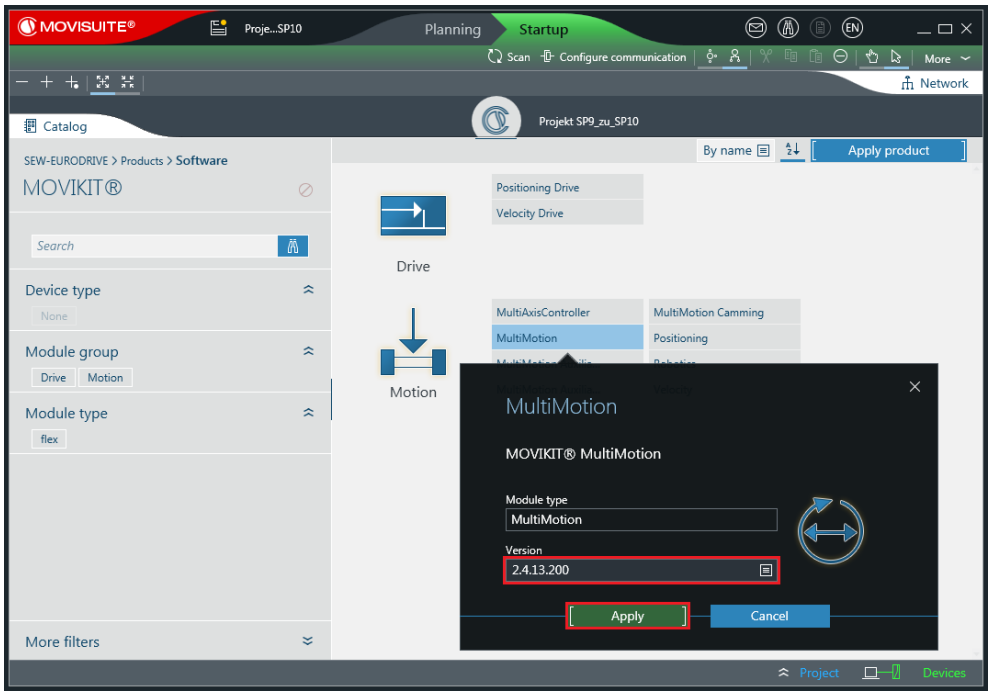


28535189899

2. Click the MOVIKIT® software module type.
3. Select version 2.4.13.200.

25973479/EN – 03/2019

4. Click [Apply].



28535987595

5. Repeat this step for all software modules.

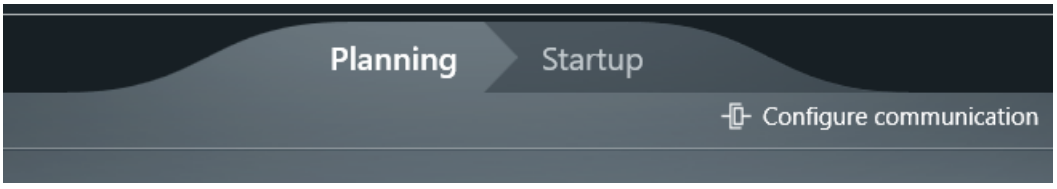
⇨ You have now successfully updated the software modules to the latest version.

Comparing and adjusting settings

Some settings are reset to the factory setting when updating the software modules. You therefore have to set them to the required value again by means of a comparison. To do so, perform the steps in the sections "Comparing settings" (→ 🖹 27) and "Adjusting settings" (→ 🖹 29) for all devices in the software module.

Comparing settings

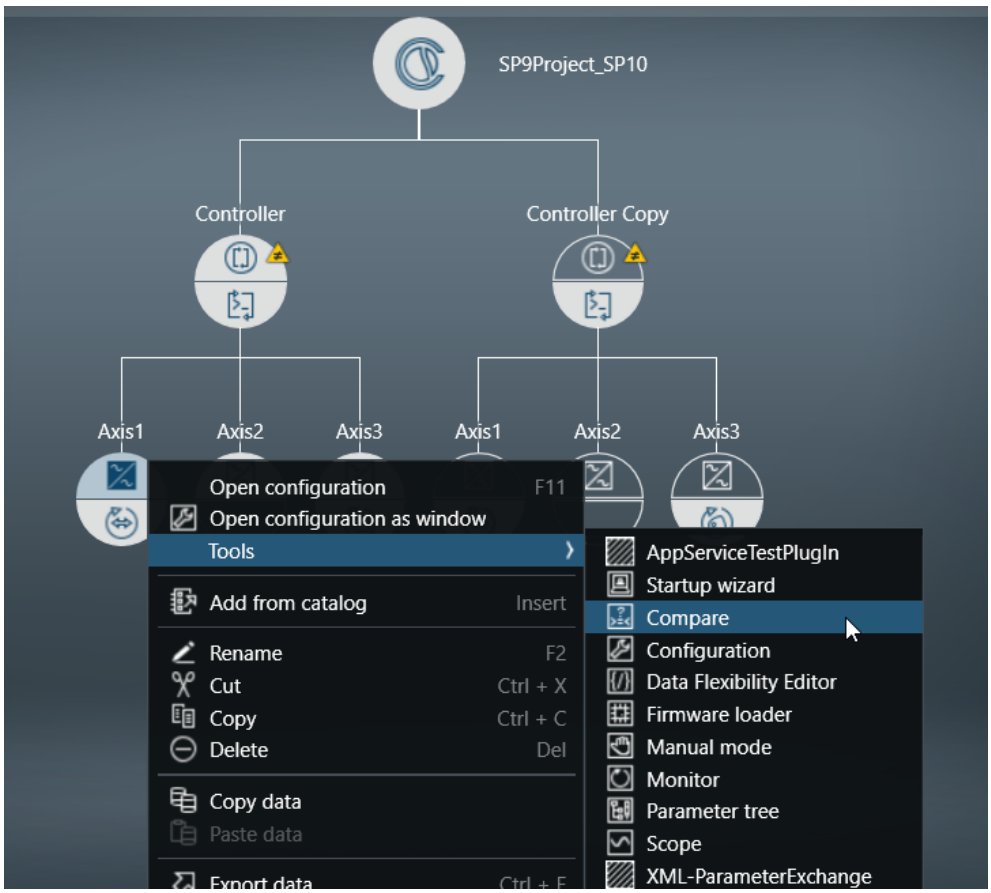
1. Click the "Planning" tab.



28536311051

⇨ MOVISUITE® changes to the "Planning " work phase.

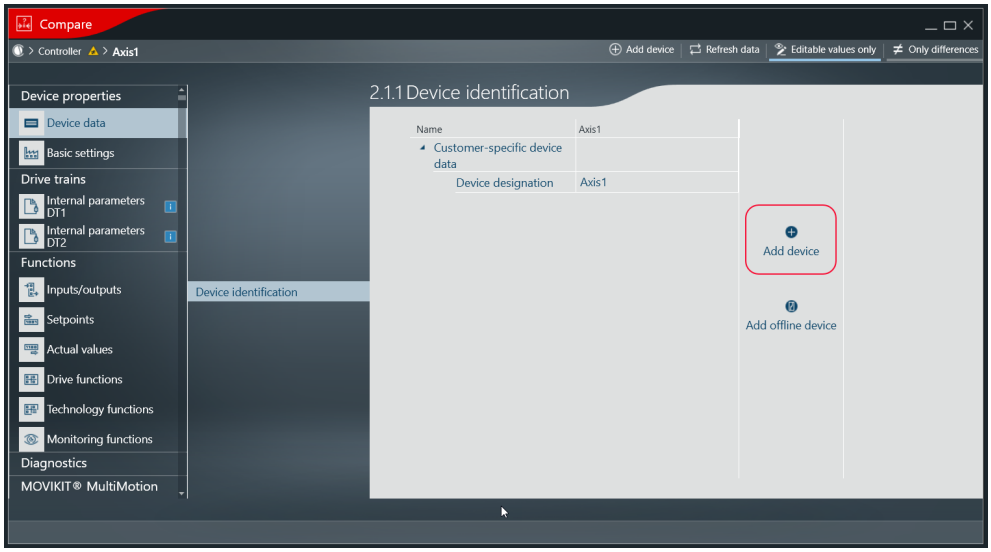
2. On the device (for example "Axis1"), select [Tools] > [Compare] from the context menu.



28536315659

⇨ MOVISUITE® opens the "Compare" screen.

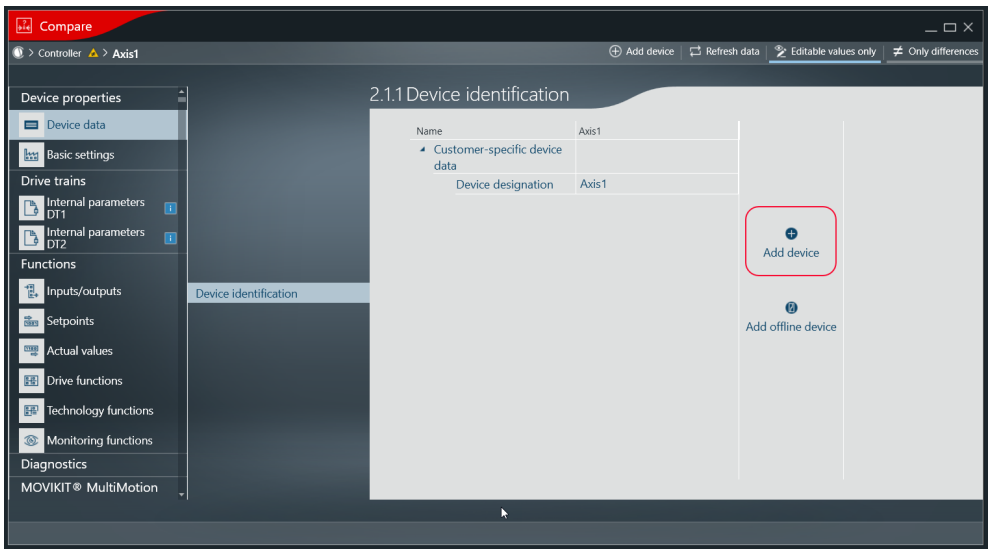
3. Click [Device data] > [Device identification] > [Add device].



28536318091

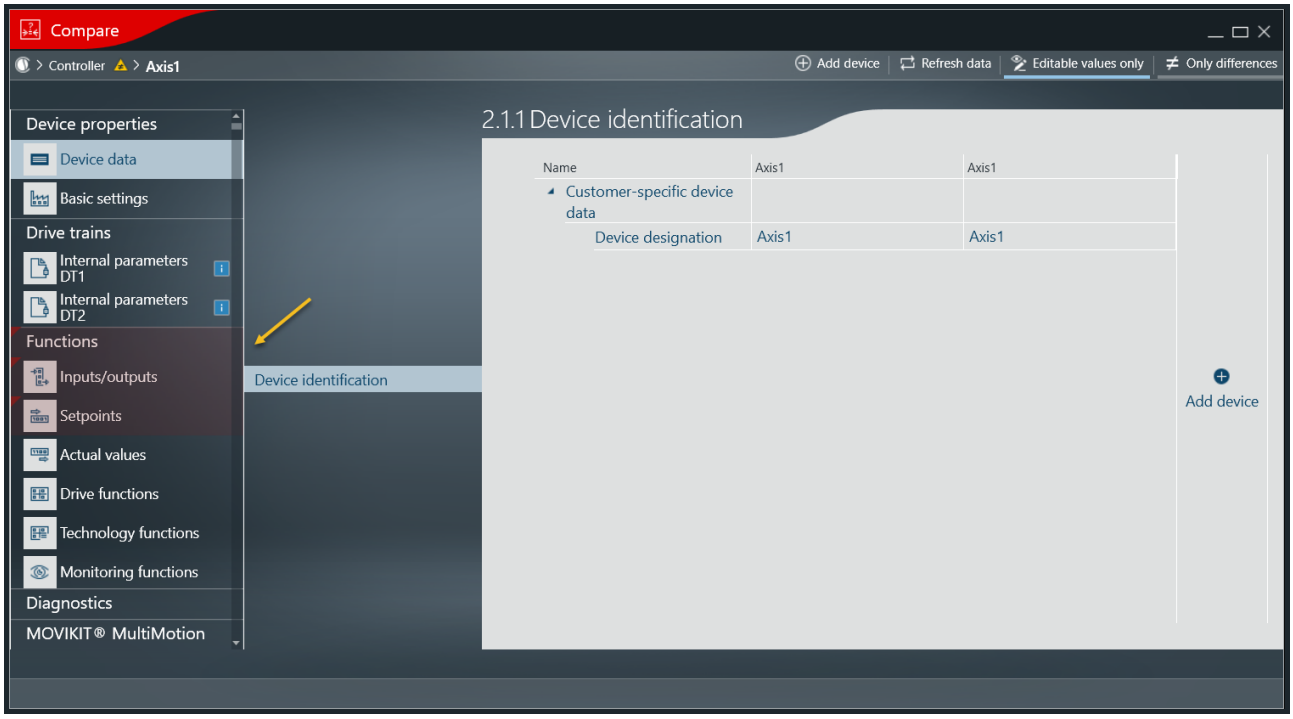
25973479/EN – 03/2019

4. As the item to be compared, select the device underneath the copied controller node that corresponds to the first device.



28536320523

⇨ Sections with differences are indicated with red background in MOVISUITE®.



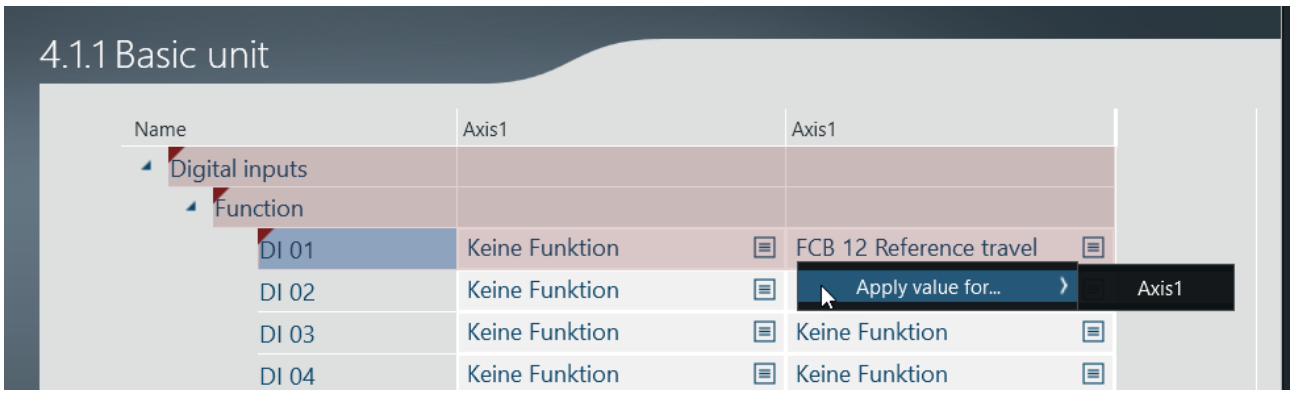
28536322955

Adjusting settings

Perform the following steps for each section in which differences have been identified.

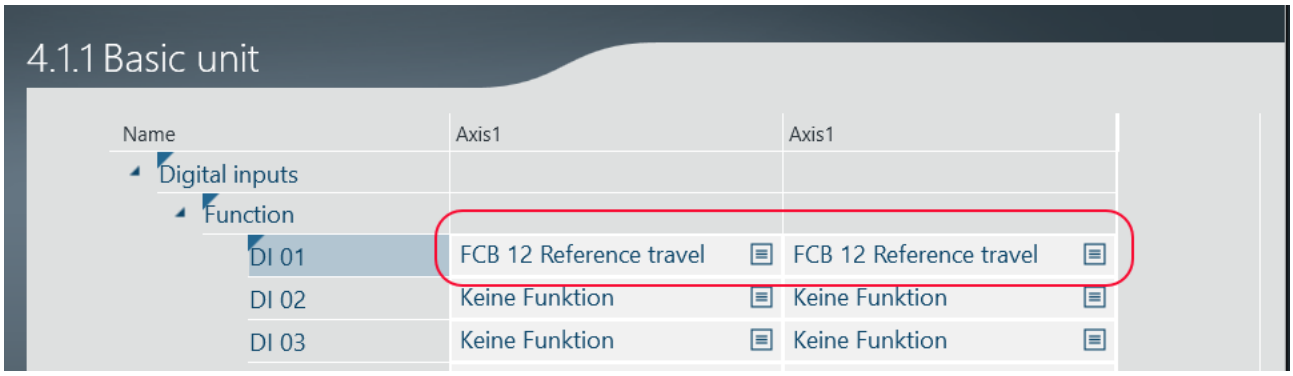
1. Click on the section.
2. Click on a parameter with differences.

3. In the right column of the comparison view, select [Apply value for...] from the context menu.



28536325387

4. Click on the name of the device for which you want to apply the value.



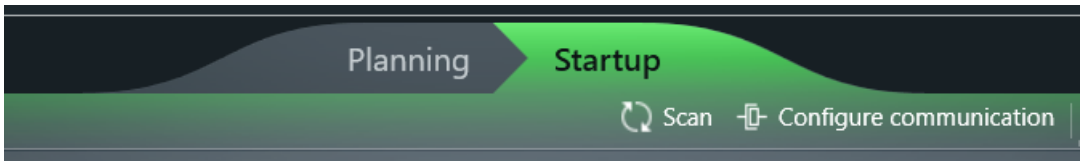
28536327819

⇨ Device and software module now reflect the latest state.

Saving settings

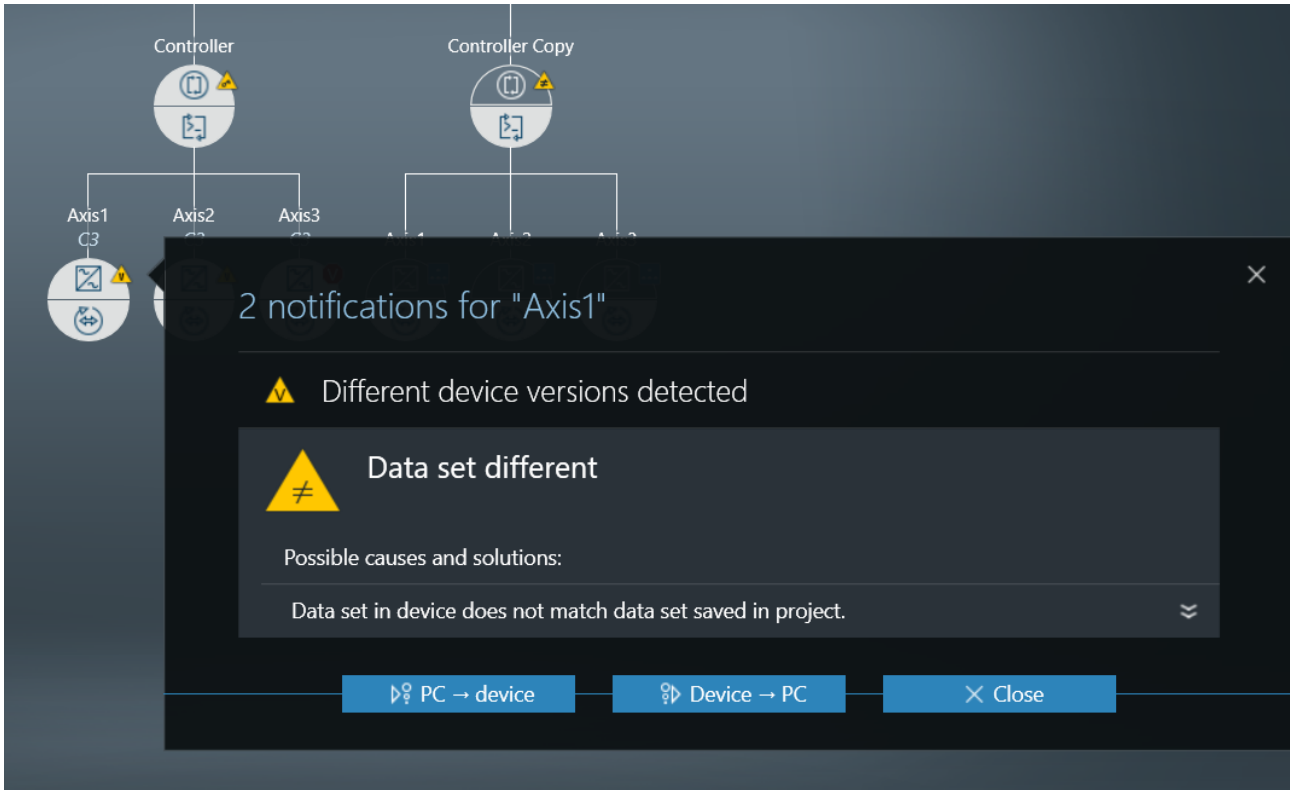
To complete the update, write the modified settings into the devices.

1. To do so, click the "Startup" tab.
   ⇨ MOVISUITE® changes to the "Startup" work phase.



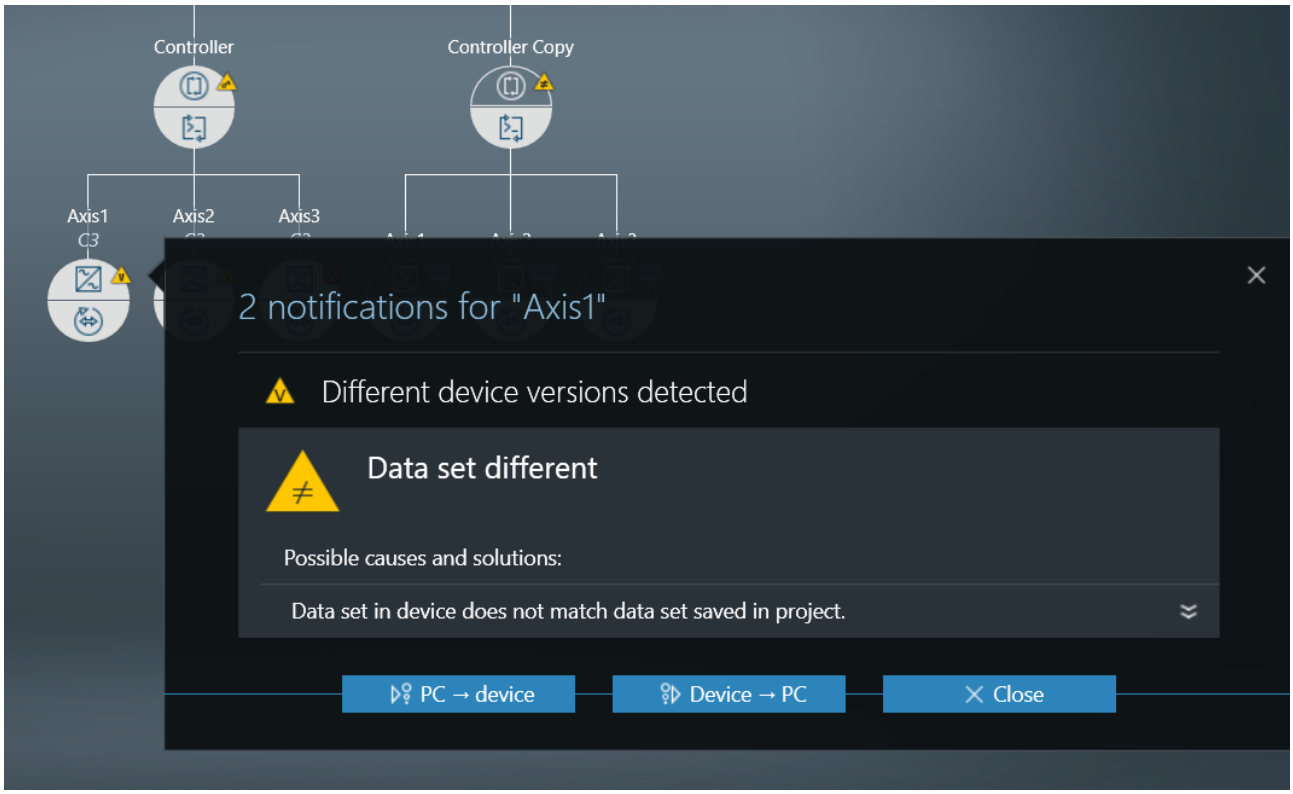
28536332683

⇨ The device nodes indicate differences in the data sets.



28536335115

2. Click the [Device → PC] button.



28535102091

3. Perform these steps for all devices whose device nodes indicate a difference.

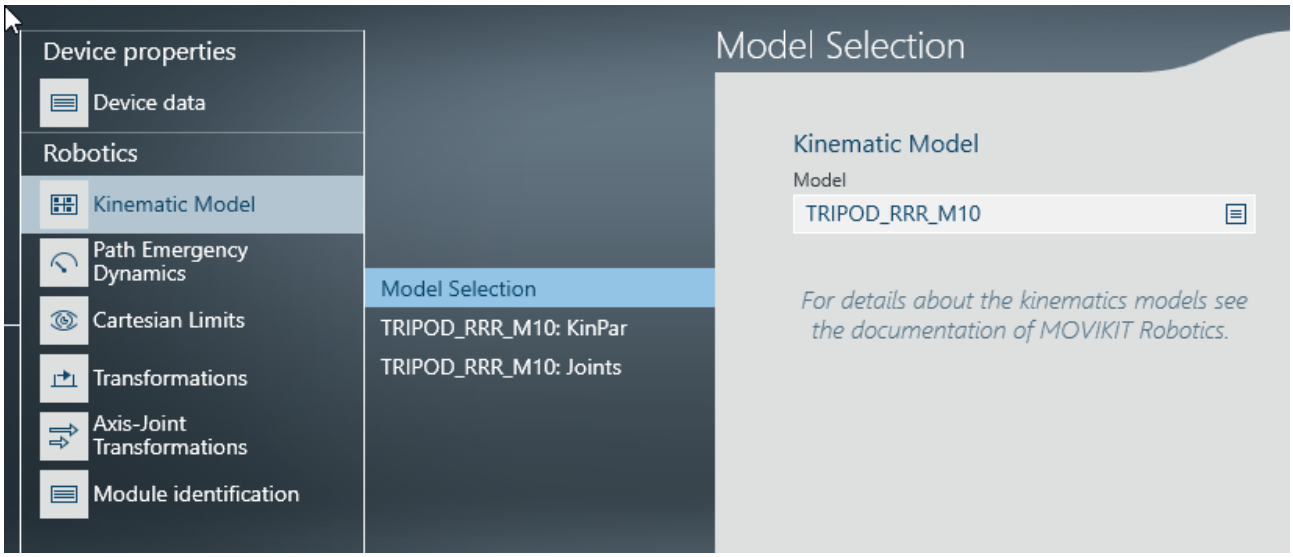
⇨ The project is now up to date.

MOVIKIT Robotics

First, perform the steps described in the chapters "Copying controller nodes" (→ 🗎 25) and "Updating software modules" (→ 🗎 26).

Setting the kinematic model

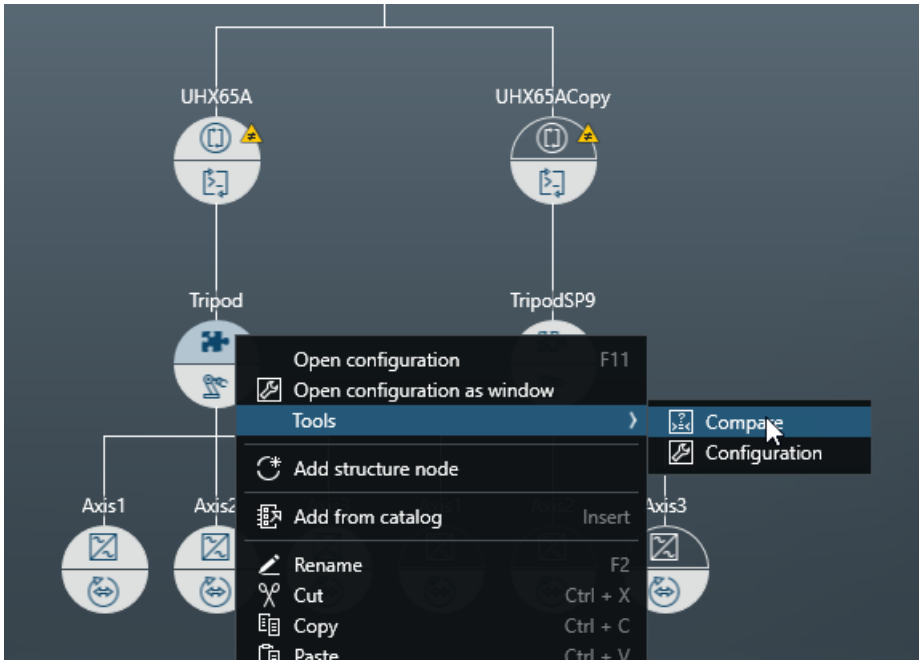
1. In the copied controller node, open the parameter [Kinematic Model] > [Model Selection].
2. Check the value for "Model".
3. In the original controller node, open the parameter [Kinematic Model] > [Model Selection].



28536594315

25973479/EN – 03/2019

4. Check the value for "Model". If the value for "Model" differs from that in the copied controller node, select it accordingly.
5. On the device (for example "Axis1"), select [Tools] > [Compare] from the context menu.



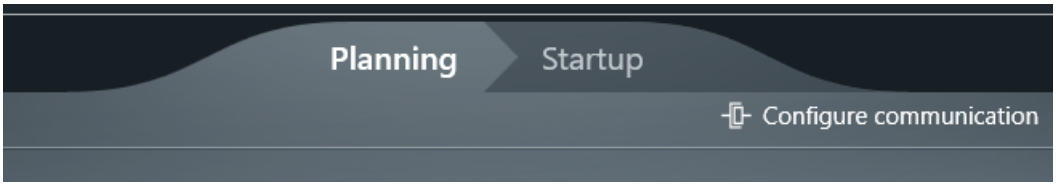
28536345483

Comparing and adjusting settings

Some settings are reset to the factory setting when updating the software modules. You therefore have to set them to the required value again by means of a comparison. To do so, perform the steps in the sections "Comparing settings" (→ 🗎 33) and "Adjusting settings" (→ 🗎 35) for all devices in the software module.

Comparing settings

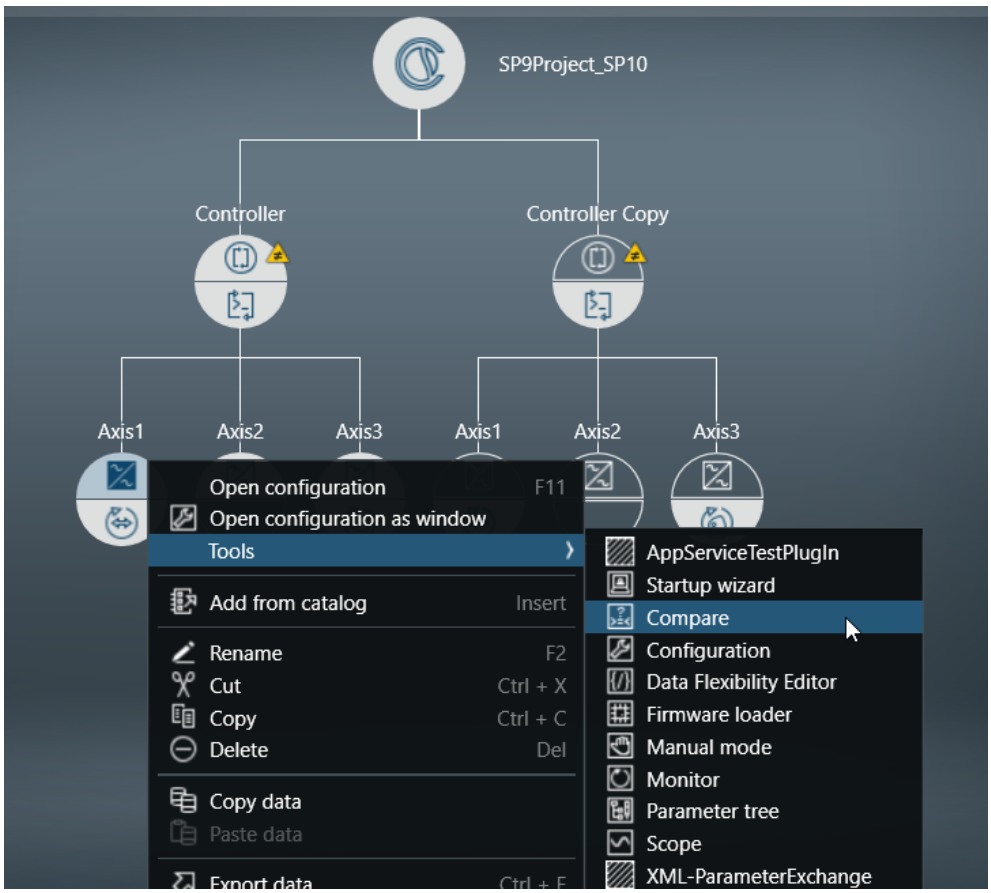
1. Click the "Planning" tab.



28536311051

⇨ MOVISUITE® changes to the "Planning " work phase.

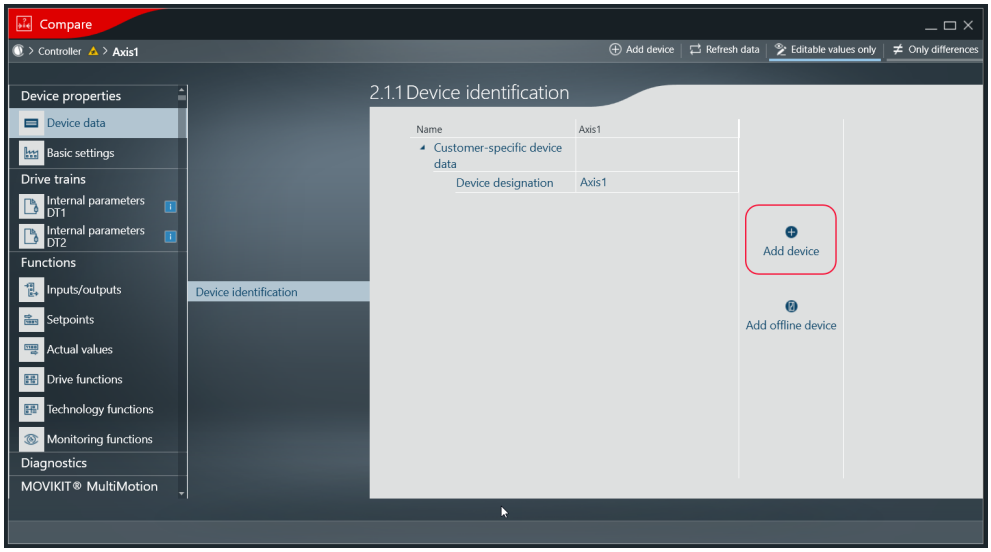
2. On the device (for example "Axis1"), select [Tools] > [Compare] from the context menu.



28536315659

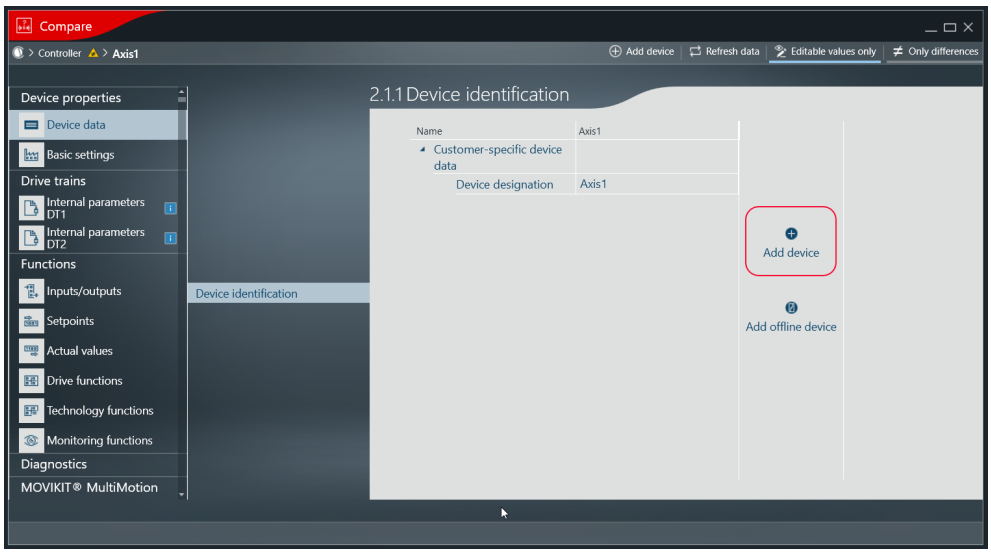
⇨ MOVISUITE® opens the "Compare" screen.

3. Click [Device data] > [Device identification] > [Add device].



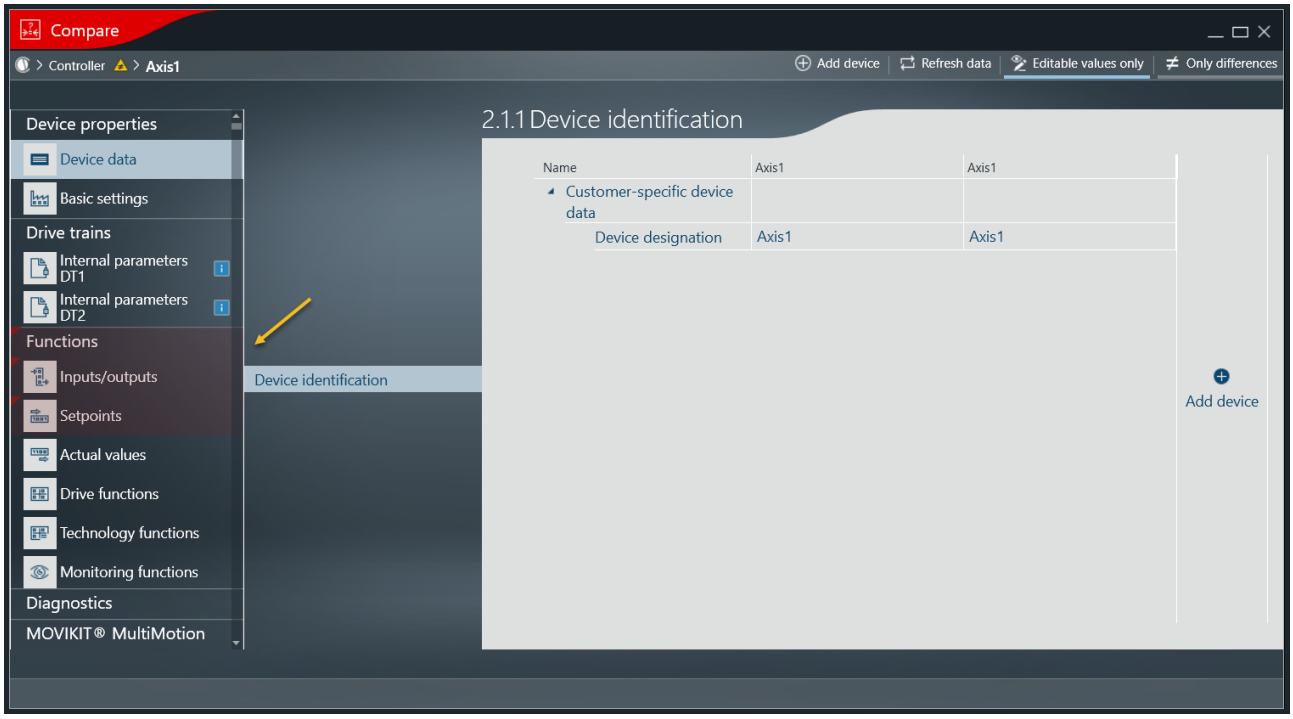
28536318091

4. As the item to be compared, select the device underneath the copied controller node that corresponds to the first device.



28536320523

⇨ Sections with differences are indicated with red background in MOVISUITE®.



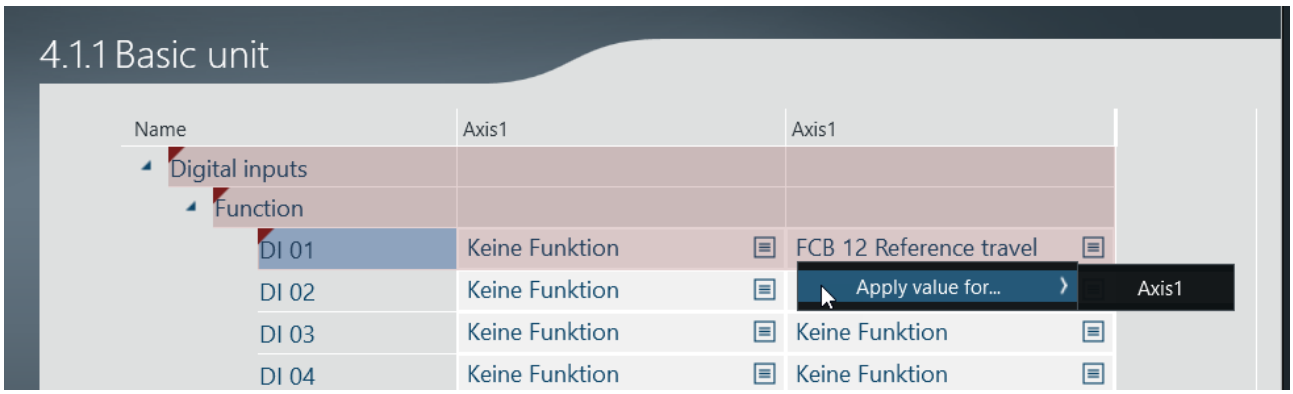
28536322955

Adjusting settings

Perform the following steps for each section in which differences have been identified.

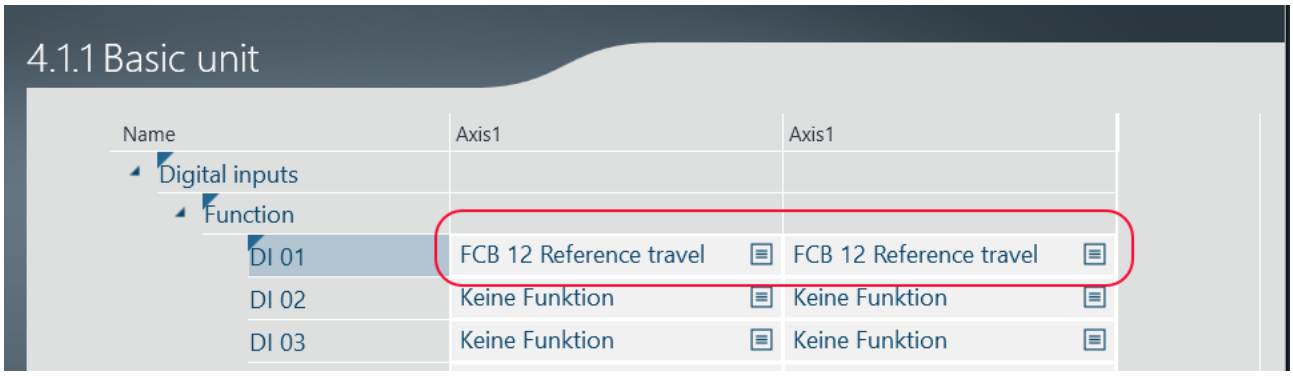
1. Click on the section.
2. Click on a parameter with differences.

3. In the right column of the comparison view, select [Apply value for...] from the context menu.



28536325387

4. Click on the name of the device for which you want to apply the value.



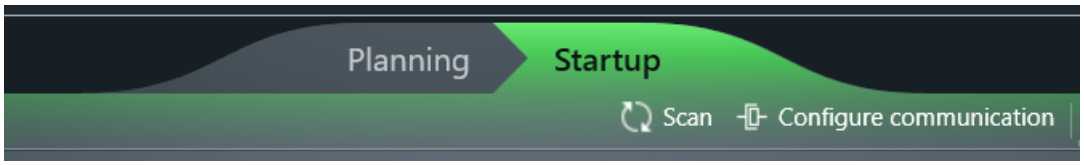
28536327819

⇨ Device and software module now reflect the latest state.

Saving settings

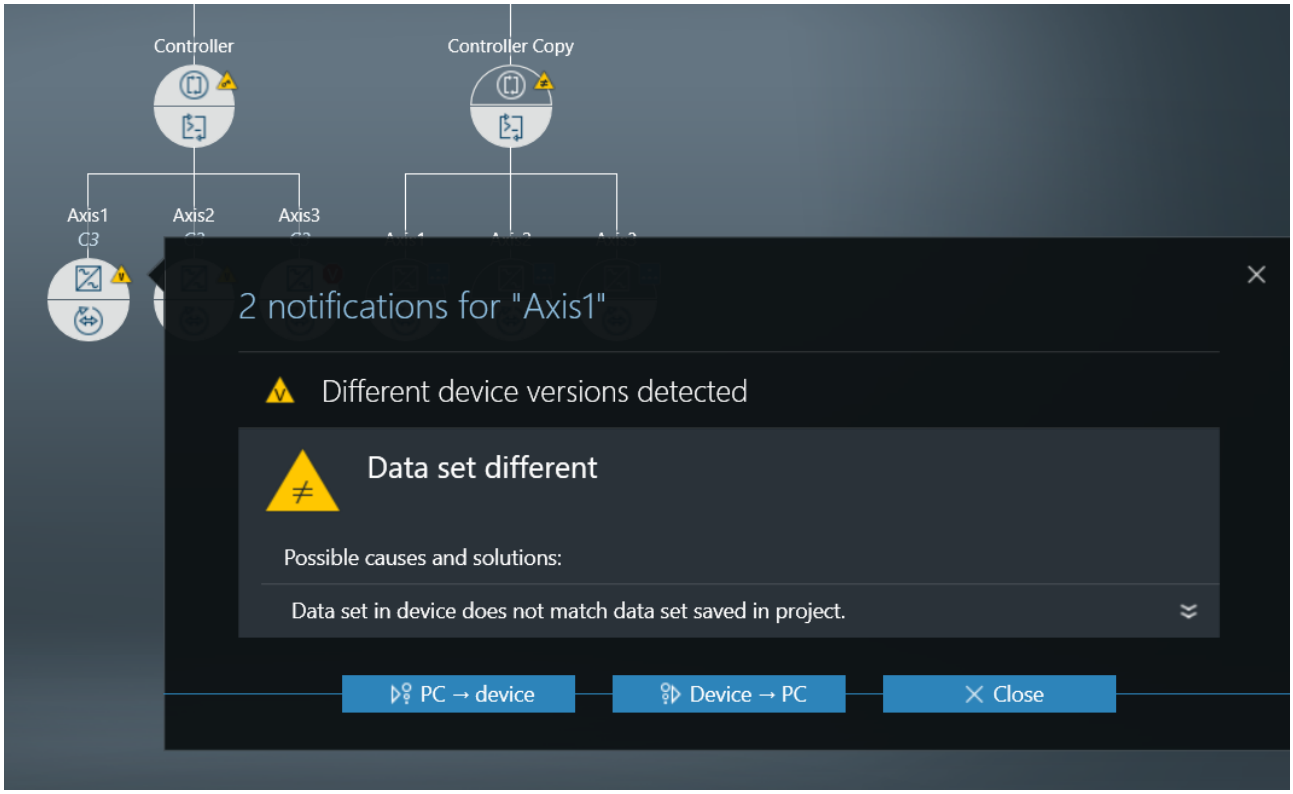
To complete the update, write the modified settings into the devices.

1. To do so, click the "Startup" tab.
   ⇨ MOVISUITE® changes to the "Startup" work phase.



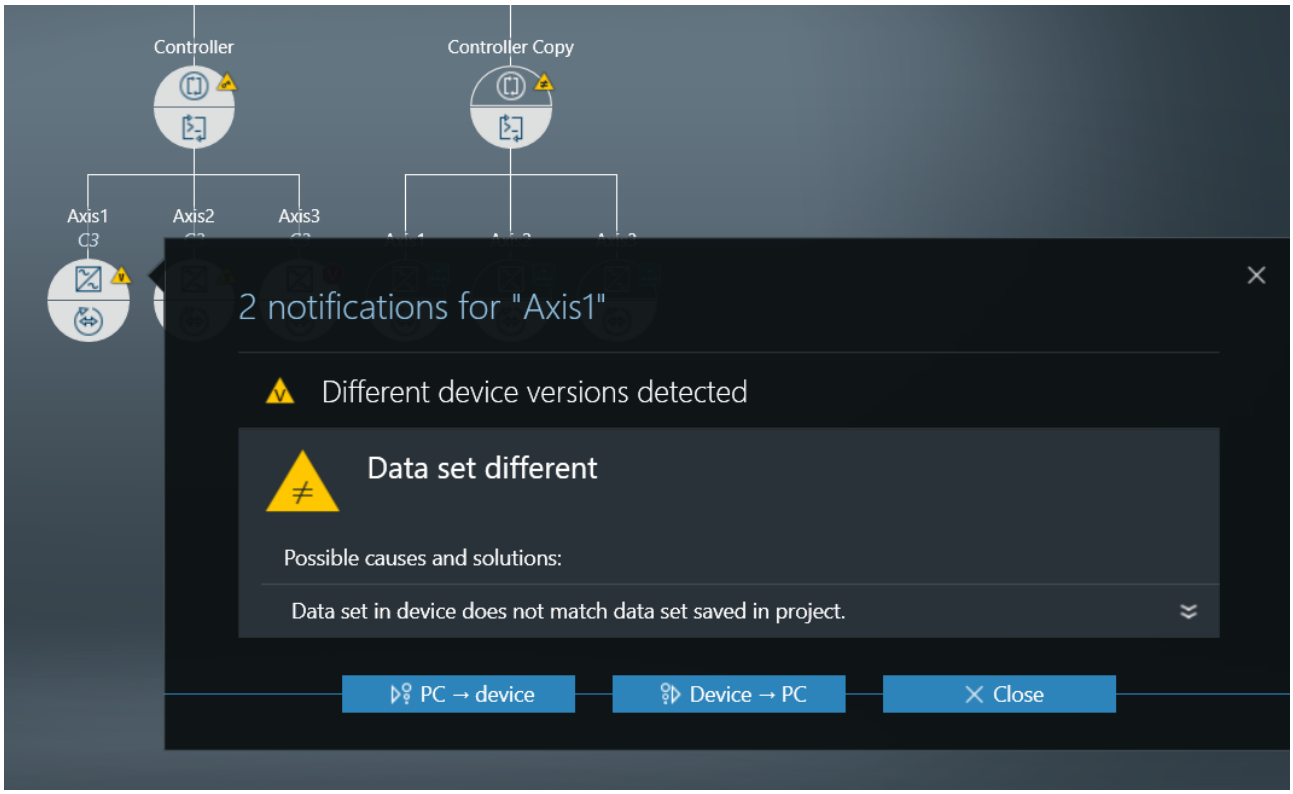
28536332683

⇨ The device nodes indicate differences in the data sets.



28536335115

2. Click the [Device → PC] button.



28535102091

3. Perform these steps for all devices whose device nodes indicate a difference.

⇨ The project is now up to date.

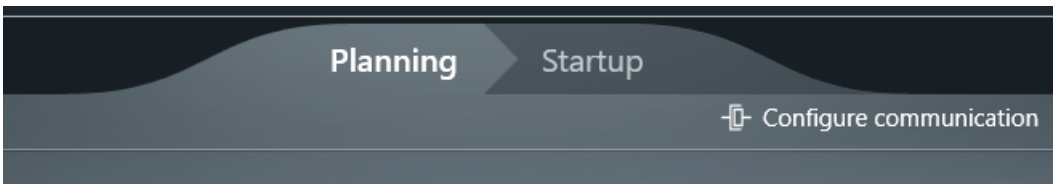
MOVIKIT MultiAxisController

First, perform the steps described in the chapters "Copying controller nodes" (→ 🗎 25) and "Updating software modules" (→ 🗎 26).

Comparing and adjusting settings

Some settings are reset to the factory setting when updating the software modules. You therefore have to set them to the required value again by means of a comparison. Perform the following steps for all software modules.

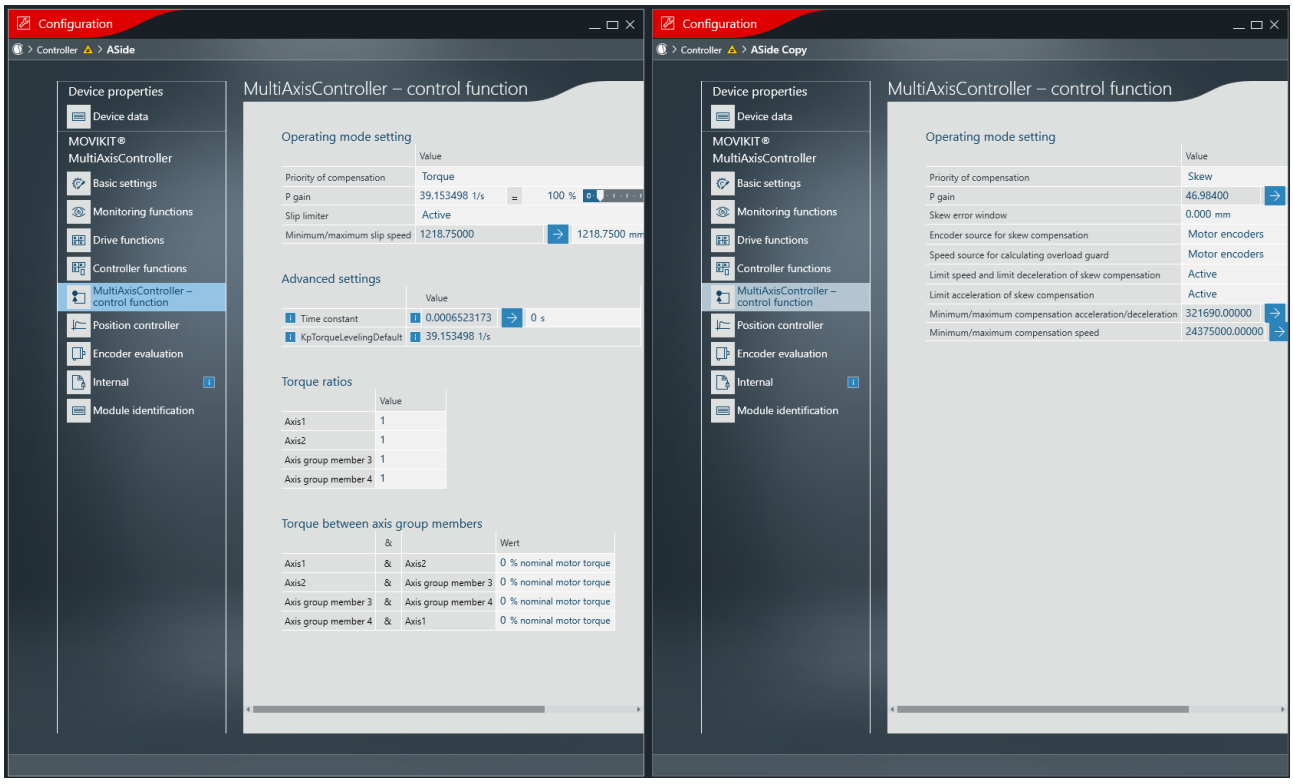
1. Click the "Planning" tab.



28536311051

⇨ MOVISUITE® changes to the "Planning " work phase.

2. On the original software module, select [Open configuration as window] from the context menu.
3. On the copied software module, select [Open configuration as window] from the context menu.
4. Arrange the two configuration windows next to one another.



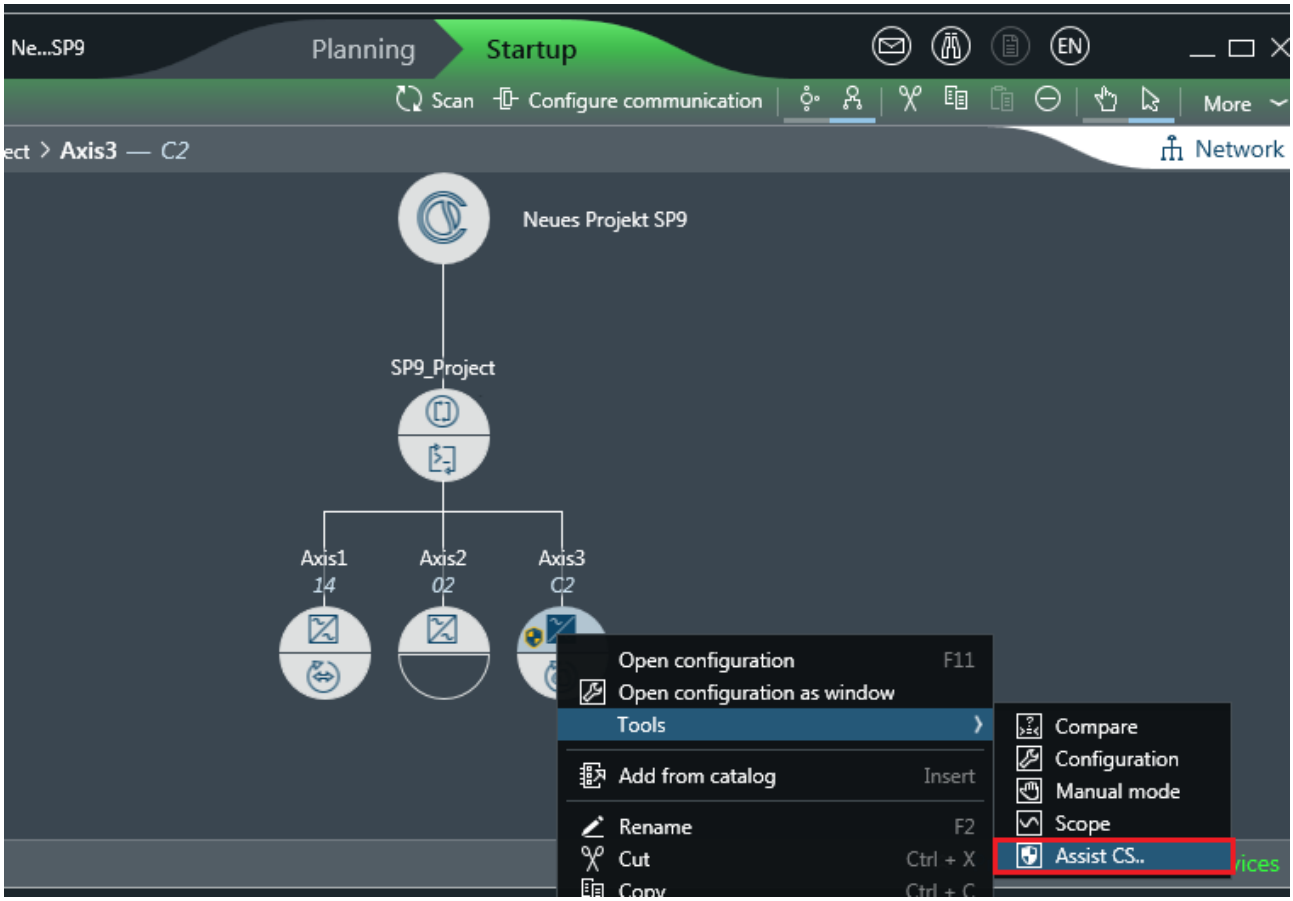
28536347915

5. Transfer the configuration values from the copied software module to the original software module.

25973479/EN – 03/2019

5.2.5 Restoring the parameter setting of the safety card

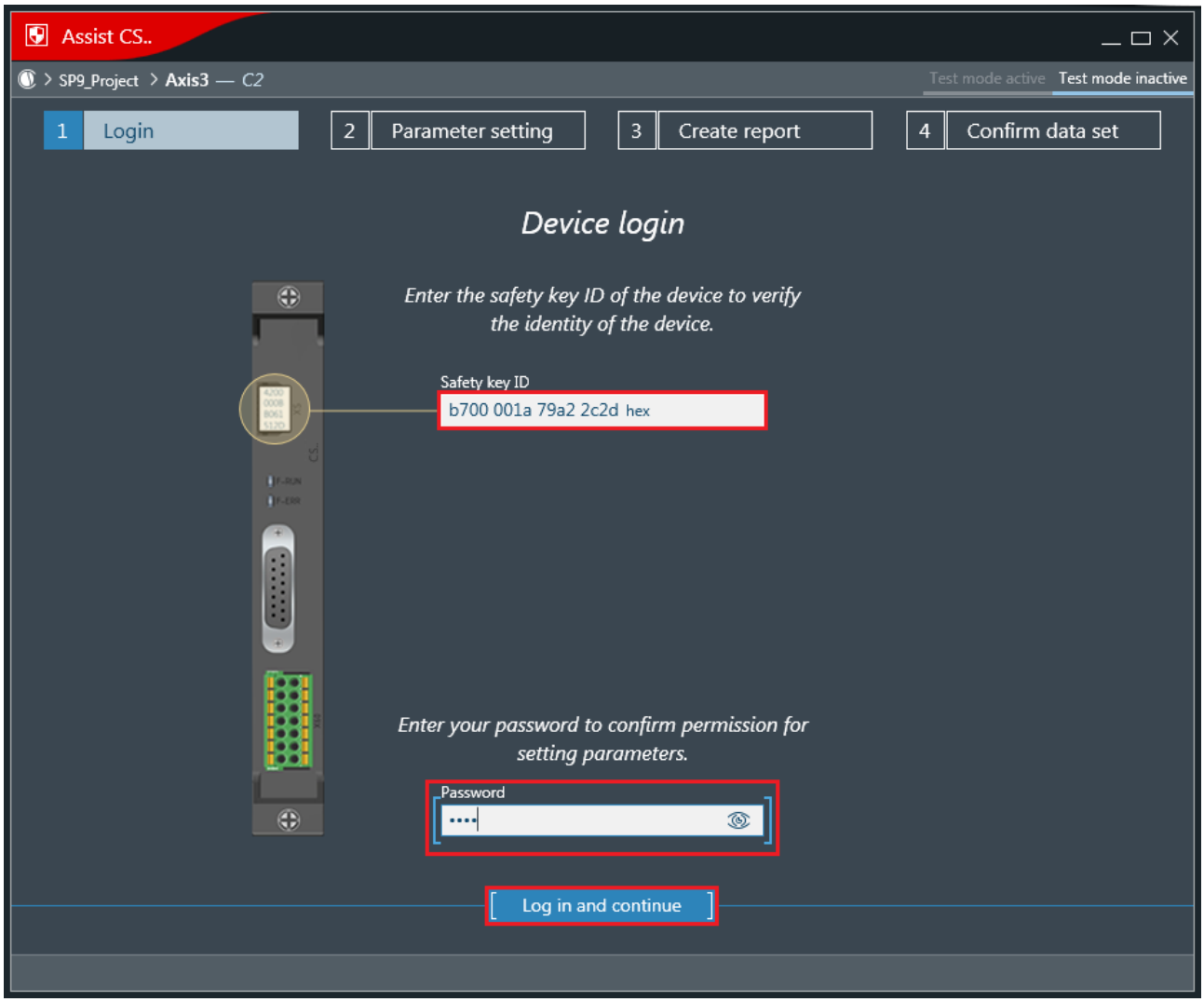
1. Right click to open the context menu of the axis with the integrated safety card.
2. Start the "Assist CS.." tool.



28388740875

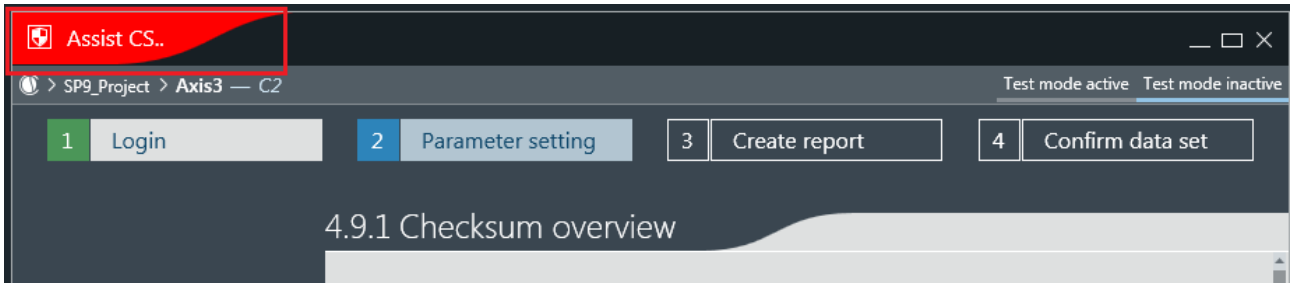
3. Enter the safety key ID and the password.

4. Click the [Log in and continue] button.



28388745483

5. Click the red tab "Assist CS..".



28535023627

⇨ The main menu of the "Assist CS.." tool is displayed.

6. Click the [Import] button.
7. Select the import file.
8. Confirm the message indicating that import is completed.
9. Click [Transfer data to device and continue with "Create report"].

⇨ A window opens with a warning of the turning motor.

25973479/EN – 03/2019

10. If you are sure that the motor cannot turn or that a turning motor does not pose any risk, then click [Yes].
    ⇨ A window opens indicating that the parameters have been transferred successfully.
11. Next click [Continue with report creation].
12. Close the "Asisst CS.." tool.
    ⇨ MOVISUITE® signals a fault of the axis with the new safety card.
13. To acknowledge the signaled fault, reset the voltage of the axis module.

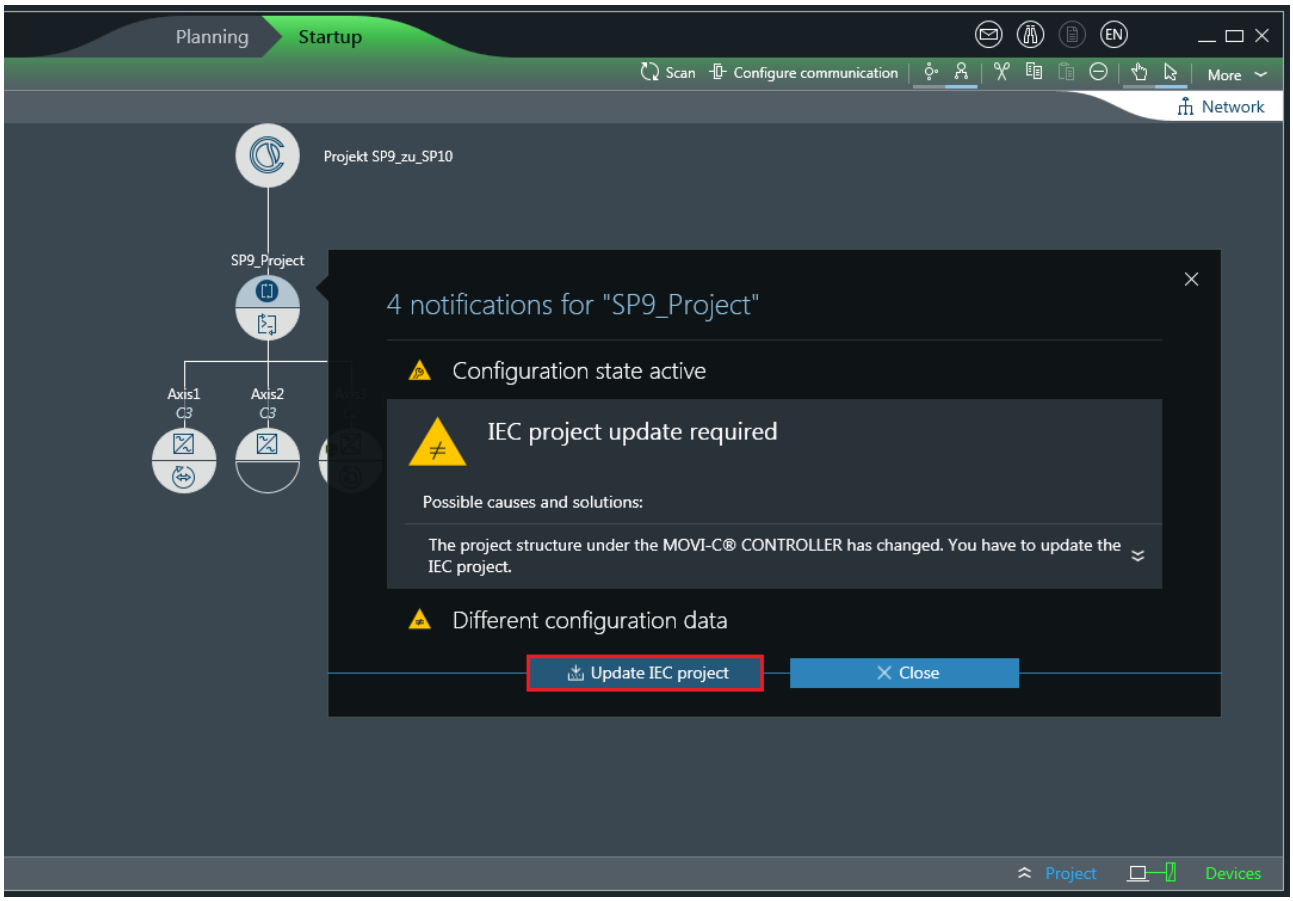
⇨ You have now successfully taken into operation the new safety card with the parameters of the replaced card.

INFORMATION

The ParCrcBus has changed. Adjust it in the program of the higher-level safety controller.

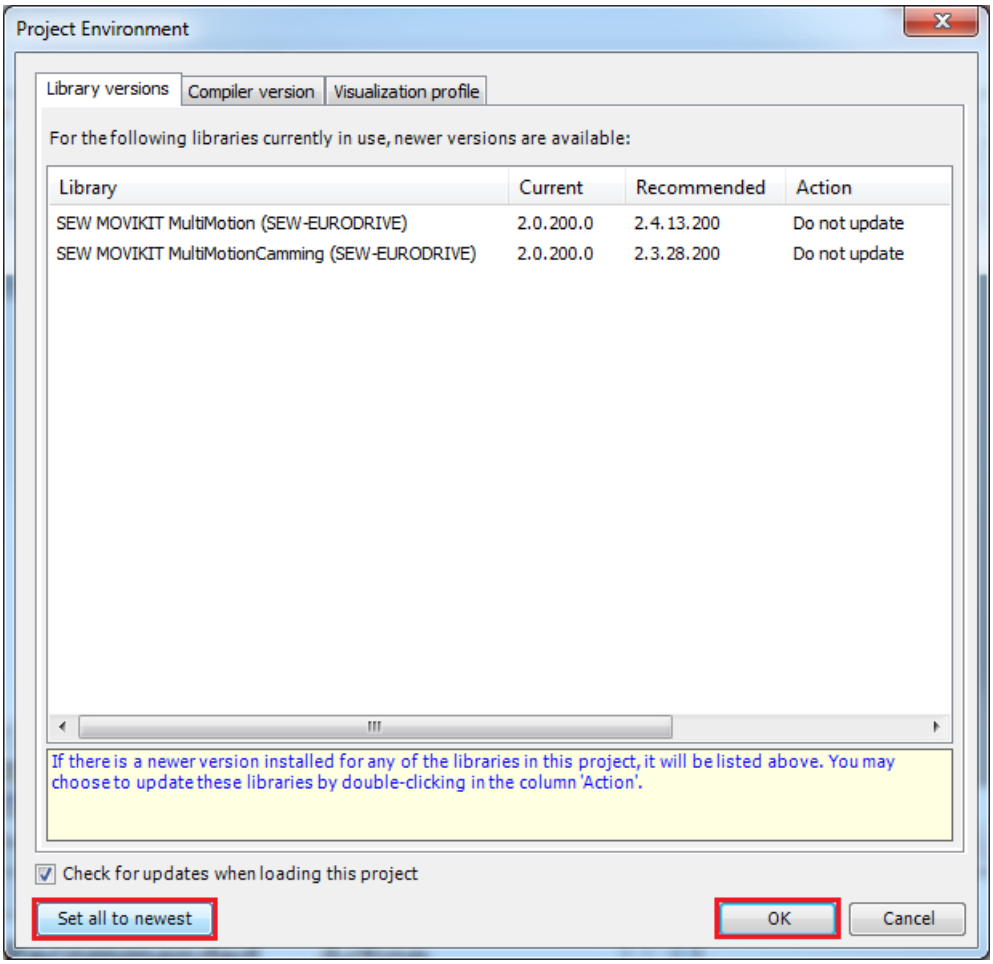
5.2.6 Updating the IEC project

1. Click on the yellow warning symbol on the node of the IEC project.
   ⇨ The notification window of the IEC project opens.



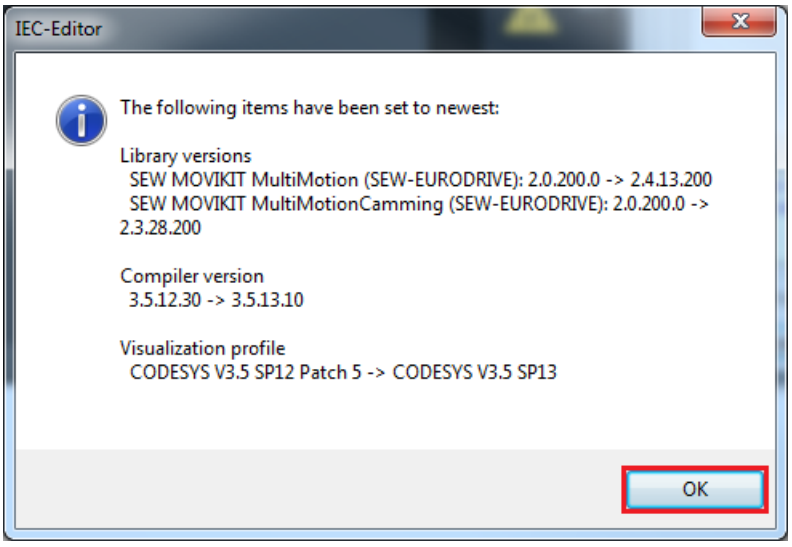
28545068555

2. Click the [Update IEC project] button.
   ⇨ The "Project environment" window opens.



28545071755

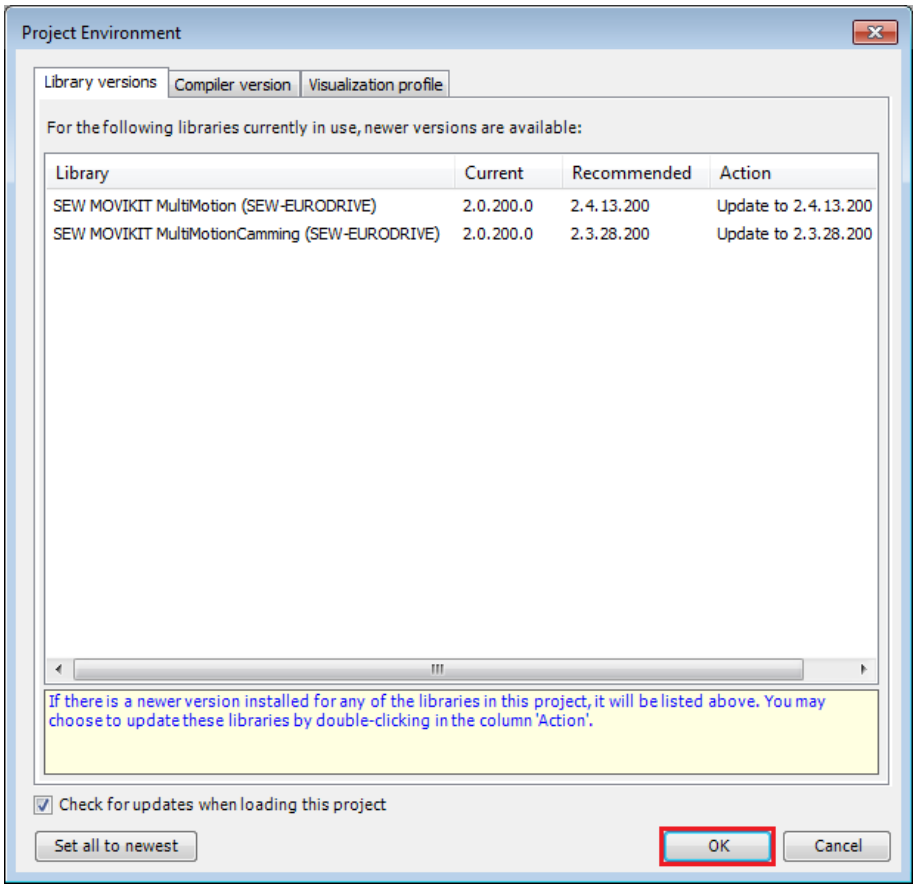
3. Click the [Set all to newest] button.
   ⇨ A confirmation window opens.



28545194123

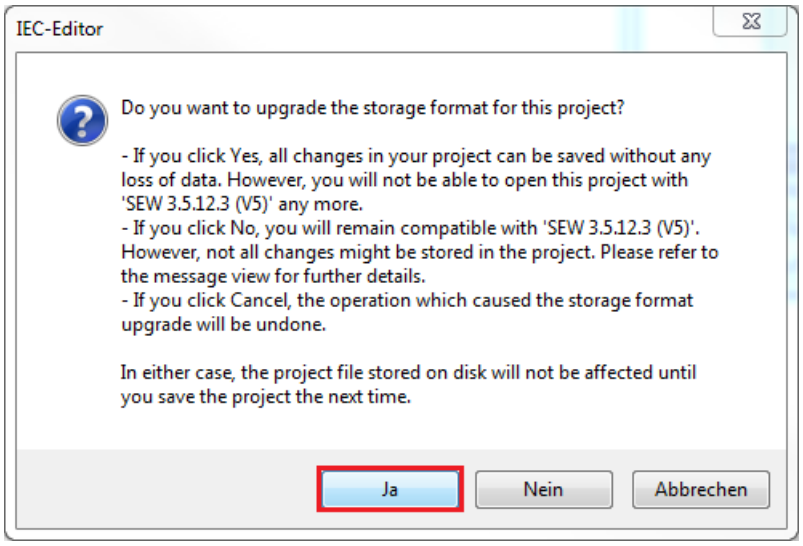
25973479/EN – 03/2019

4. Click [OK].
   ⇨ The "Project environment" window opens.



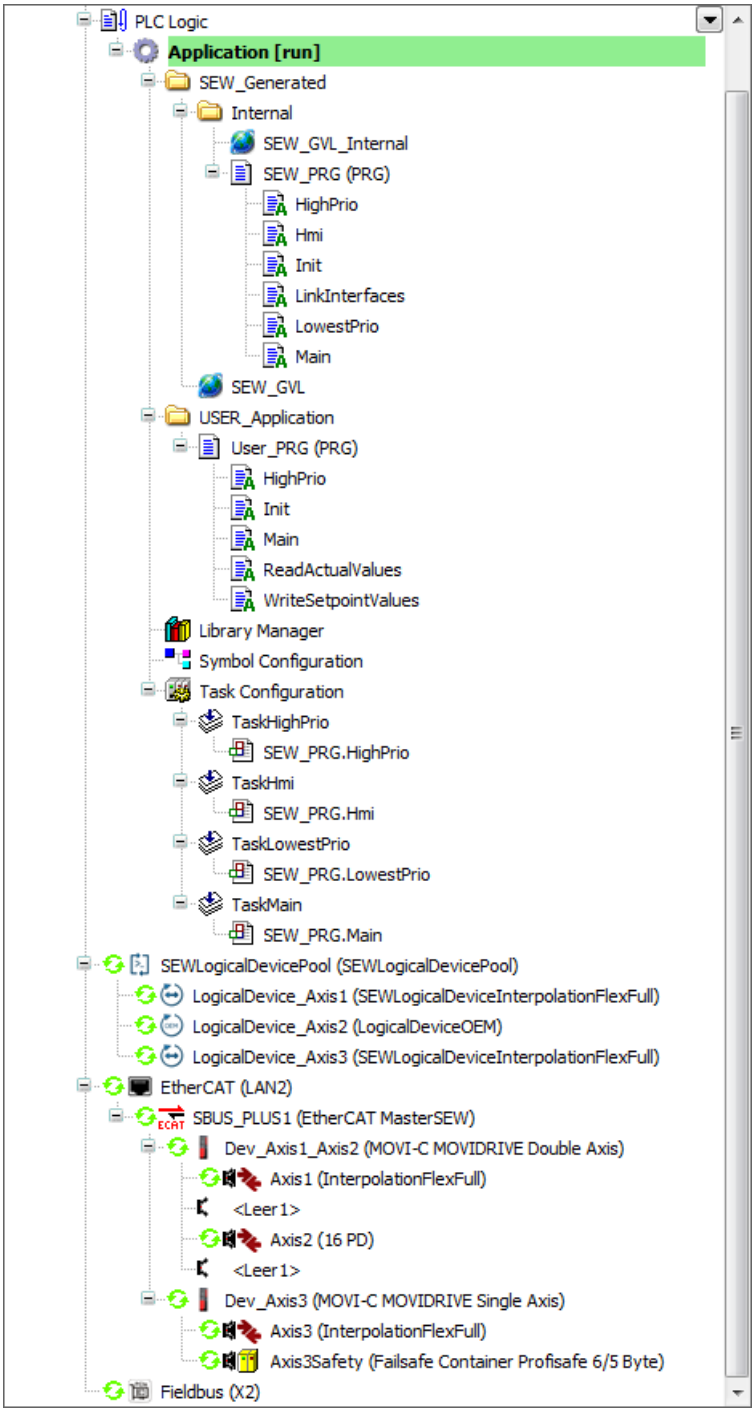
9007227635065739

5. Click [OK].
   ⇨ A dialog prompting you to update the storage format opens.



28545199371

6. Click the [Yes] button.
   ⇨ The functions compile, save, start, and login in the IEC Editor work properly.
   ⇨ After login, the components are displayed without errors.



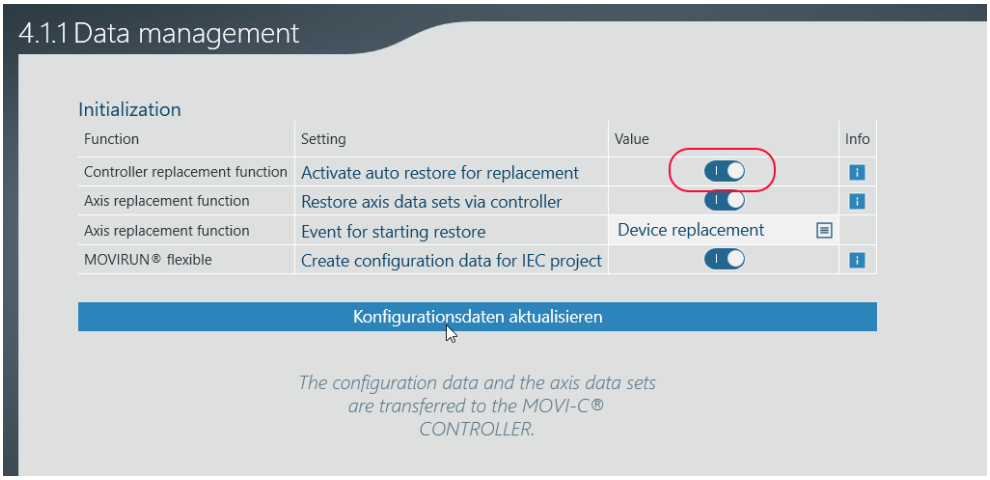
28525070347

7. Create a boot project.
   ⇨ The IEC Editor project is saved on the SD memory card of MOVI-C® CONTROLLER power UHX85A and is still present after restart.
8. Save the project in the IEC Editor.
9. Close the IEC Editor.

5.3 Controller replacement function

Check to see whether the controller replacement function is enabled to ensure that all settings are reloaded correctly in the event of a controller hardware replacement.

1. Select [Functions] > [Data management] > [Device replacement] from the menu.
2. To enable the controller replacement function, set the value to "1".
3. Click on the [Update configuration data] button.



28535095819

6 Overview of version numbers

You can assign the available hardware and software components to an SP using the following tables. The "SP10" column lists only the latest version numbers. The version numbers of SP9/9.1 are included in SP10.

6.1 Engineering software

Component	SP7	SP8	SP9.1	SP10
MOVISUITE®	V1.1.1180.0	V1.2.1253.0	v2.0.114.100	v2.1.237.0
IEC Editor	3.5 SP9 patch 5	3.5 SP9 patch 5	3.5 SP12 patch 3	3.5 SP13 patch 1
SEW profile (IEC)	SEW 3.5.9.50 (V3)	SEW 3.5.9.50 (V3)	SEW 3.5.12.3 (V5)	SEW 3.5.13.1 (V6)

6.2 IEC libraries

Component	SP7	SP8	SP9.1	SP10
SEW IoDrvEtherCAT	1.0.200.0	1.1.200.2	1.3.200.0	1.4.200.0
SEW IoDrvLogic-alDevicePool	1.0.200.0	1.0.200.0	1.1.200.0	1.3.200.0
SEW Common Fieldbus Slave Ext.	1.2.200.0	1.2.200.0	1.3.200.0	1.4.200.0
SEW DeviceHandler	1.0.200.0	1.0.202.0	1.1.200.1	1.3.200.0
SEW DeviceHandler Interfaces	1.0.100.7	1.0.100.7	-	1.0.100.7
SEW DeviceHandler Interfaces 2	-	-	1.1.200.1	1.1.200.1
SEW DeviceHandler Interfaces 3	-	-	-	1.3.200.0
SEW PDO Handling	1.0.200.0	1.0.200.0	1.0.200.0	1.0.200.0

6.3 MOVIKIT® software modules

Component	SP7	SP8	SP9.1	SP10
Velocity Drive	-	-	1.1.200.1	2.0.0.200
Positioning Drive	-	-	-	2.0.0.200
MultiMotion	1.3.201.0	1.5.200.0	2.0.200.0	2.4.13.200
MultiMotion Cam-ming	1.3.201.0	1.5.200.0	2.0.200.0	2.3.28.200
Robotics	-	-	2.0.200.0	2.3.21.200
MultiAxis Controller	-	-	2.0.200.0	2.6.20.200
MultiMotion Auxiliary Velocity	-	-	1.0.200.0	1.4.11.200

25973479/EN – 03/2019

Component	SP7	SP8	SP9.1	SP10
MultiMotion Auxiliary Positioning	-	-	1.0.200.0	1.4.11.200
Velocity	-	-	-	1.3.21.200
Positioning	-	-	-	1.3.21.200

6.4 MOVI-C® CONTROLLER

Component	SP7	SP8	SP9.1	SP10
power (UHX85A)	02.00	02.01	03.00	04.00
progressive (UHX65A)	-	-	02.00	03.00
advanced (UHX45A)	-	01.00	02.00	03.00
standard (UHX25A)	-	01.00	02.00	03.00

6.5 MOVIDRIVE® modular

Component	SP7	SP8	SP9.1	SP10
MDA (single-axis module)	02.03	02.10	03.00	04.00
MDA-CIA402 (single-axis module)	-	-	03.00	04.00
MDD (double-axis module)	02.03	02.10	03.00	04.00
MDD-CIA402 (double-axis module)	-	-	03.00	04.00

6.6 MOVIDRIVE® system

Component	SP7	SP8	SP9.1	SP10
MDX	02.03	02.10	03.00	04.00
MDX-CIA402	-	-	03.00	04.00

6.7 MOVIDRIVE® technology

Component	SP7	SP8	SP9.1	SP10
MDX_T	-	-	-	04.00

25973479/EN – 03/2019

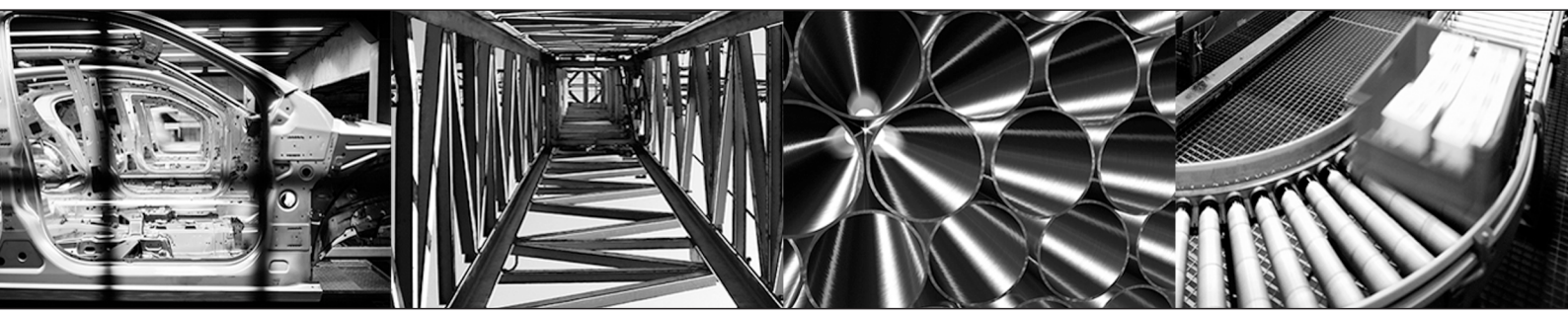
6.8 MOVI-C® decentralized drive electronics

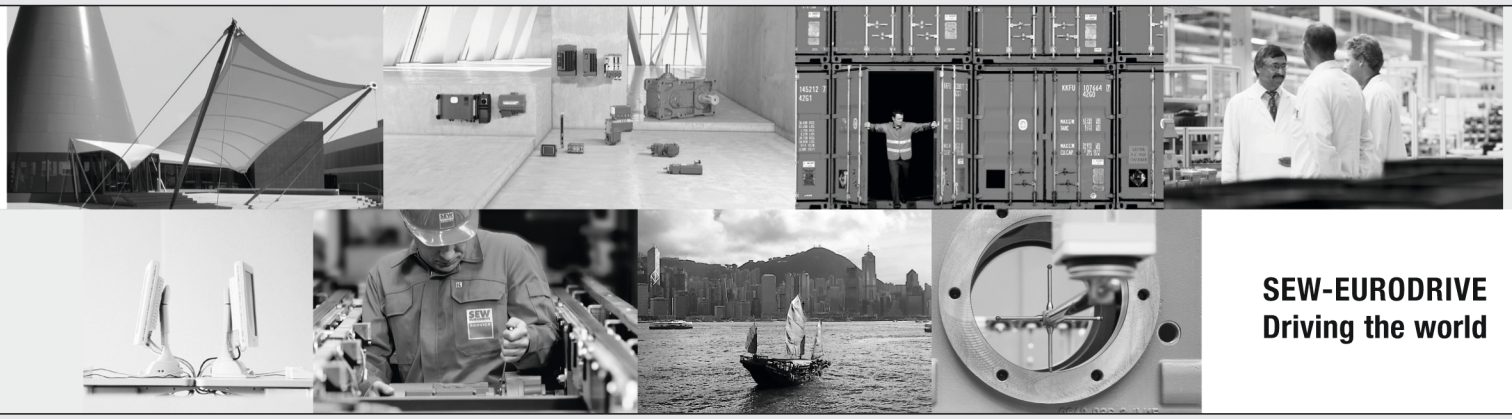
Component	SP7	SP8	SP9.1	SP10
DFC	-	-	03.10	04.00
DFC-CiA402	-	-	03.10	04.00
DSI	-	-	03.10	04.00
MOVISAFE® CSB51A safety card	-	-	-	02.05

6.9 MOVISAFE® safety cards

Component	SP7	SP8	SP9.1	SP10
CSS21A	-	01.05	01.05	02.05
CSB21A	-	01.05	01.05	02.05
CSS31A	-	01.05	01.05	02.05
CSB31A	-	01.05	01.05	02.05

25973479/EN – 03/2019





SEW-EURODRIVE
Driving the world

SEW-EURODRIVE GmbH & Co KG
Ernst-Blickle-Str. 42
76646 BRUCHSAL
GERMANY
Tel. +49 7251 75-0
Fax +49 7251 75-1970
sew@sew-eurodrive.com
➞ **www.sew-eurodrive.com**