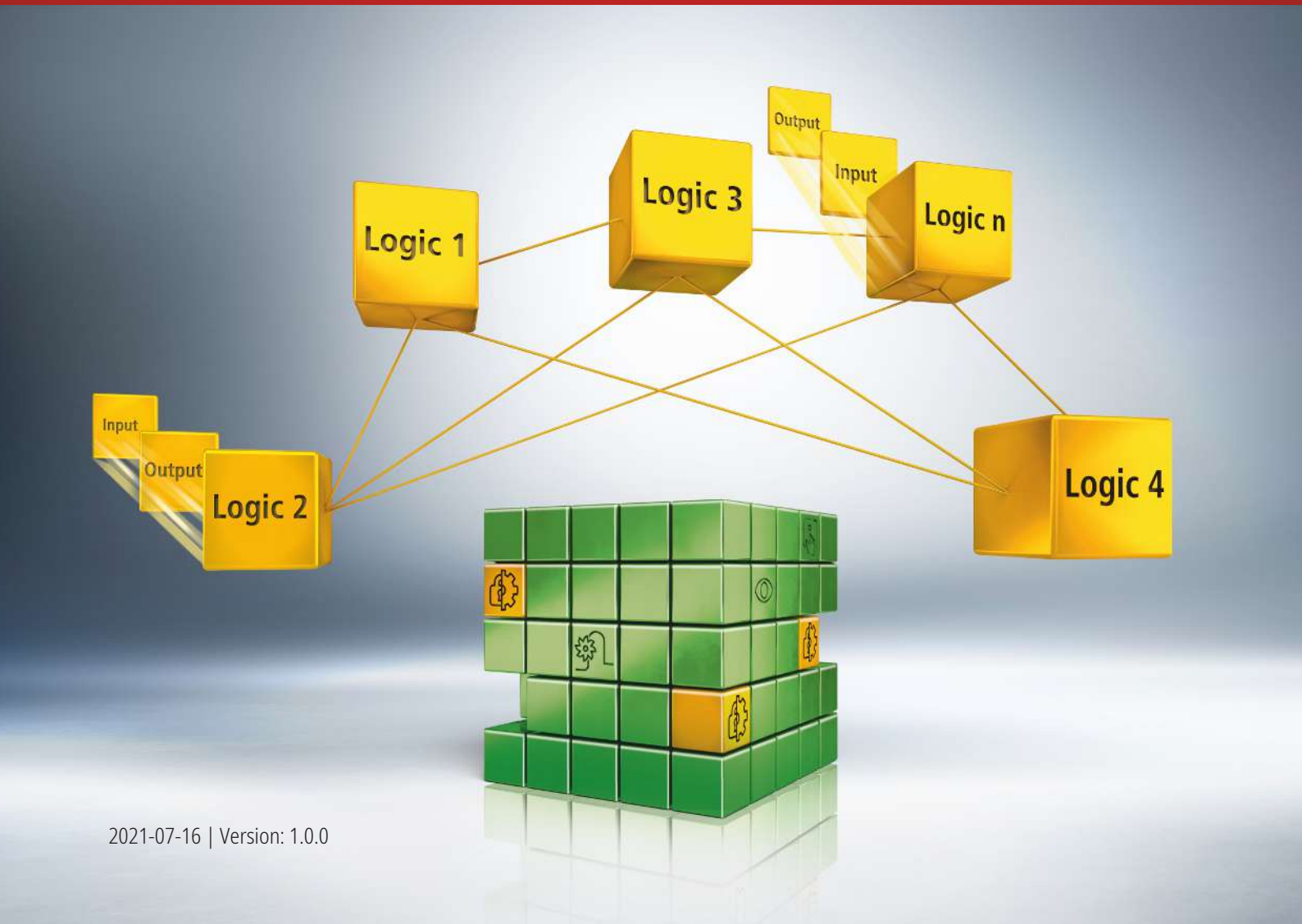
BECKHOFF New Automation Technology

TwinSAFE Tutorial 4 | EN

FW Update Wizard

Implementation of a FW update



2021-07-16 | Version: 1.0.0

1 Introduction

TwinSAFE includes several innovations that bring more functionality and performance to your safety controller. A major innovation is that the functionality of the safety controller is integrated in each TwinSAFE component. This means that you can, for example, use a TwinSAFE input component both as an input component and the safety control integrated on it to use application-specific pre-processing.

This is tutorial 4 of a tutorial series.

The aim of this tutorial series is to familiarize you with the TwinSAFE innovations using individual examples.

This tutorial is about the implementation of a FW update.

1.1 Issue statuses

Version	Comment
1.0.0	• First released version
0.0.1	• First draft

1.2 Starting point

At the starting point of the tutorial

- a standard PLC solution with an EL6910 project exists.

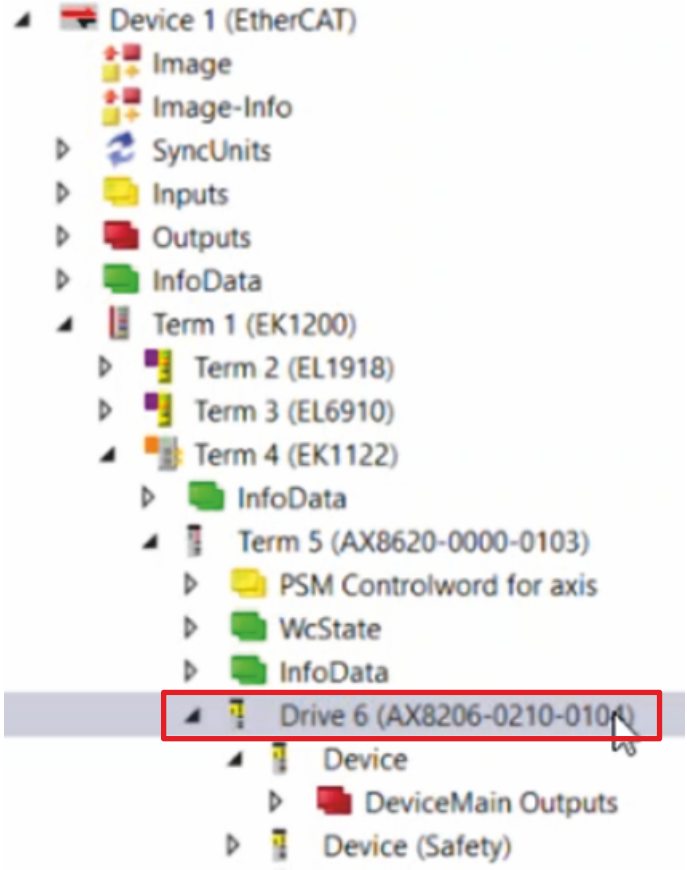
1.3 Demo system

1.3.1 Hardware

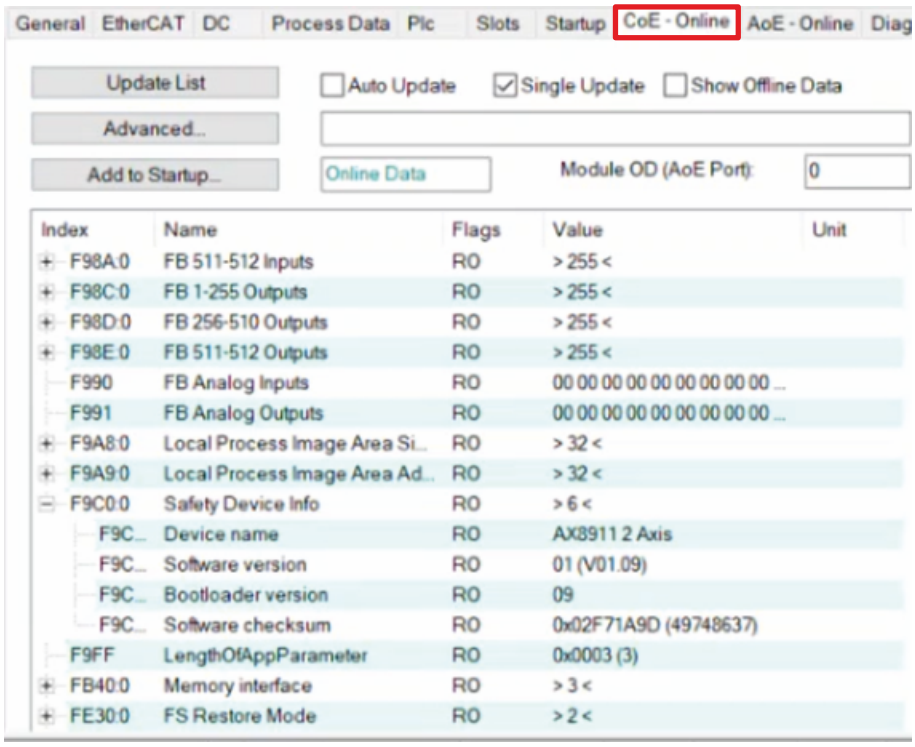
The demo system of this tutorial consists of the following hardware:

- CX for EtherCAT communication and the standard PLC controller
- EL6910 as master TwinSAFE Logic
- EL1918 with safe inputs for reading light barrier signals
- Light barrier
- AX8000-x2xx

2 Demonstration



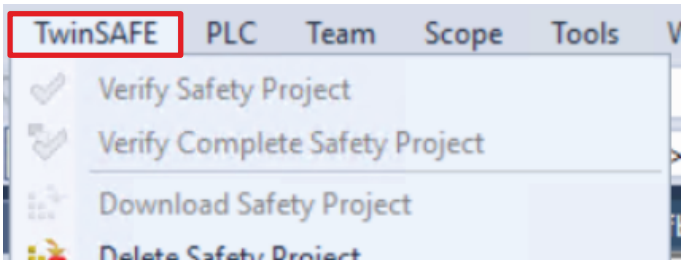
1. Open Safe Motion component in I/O configuration



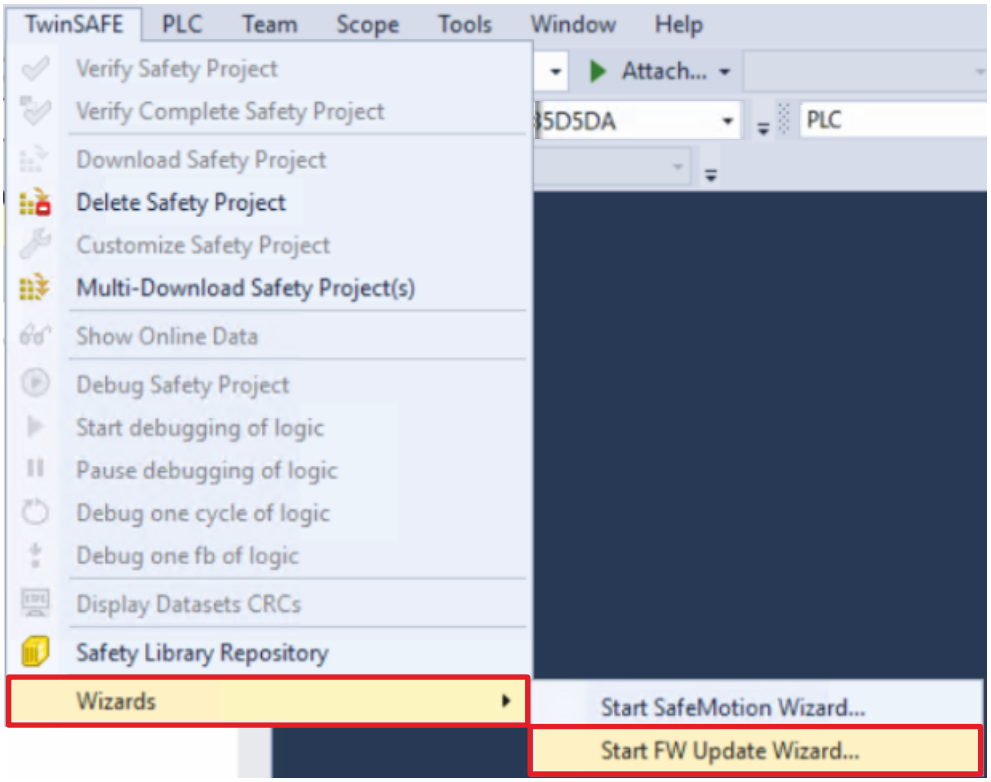
2. Open the "CoE online" tab

The CoE data provides information about your Safe Motion component, such as the software version.

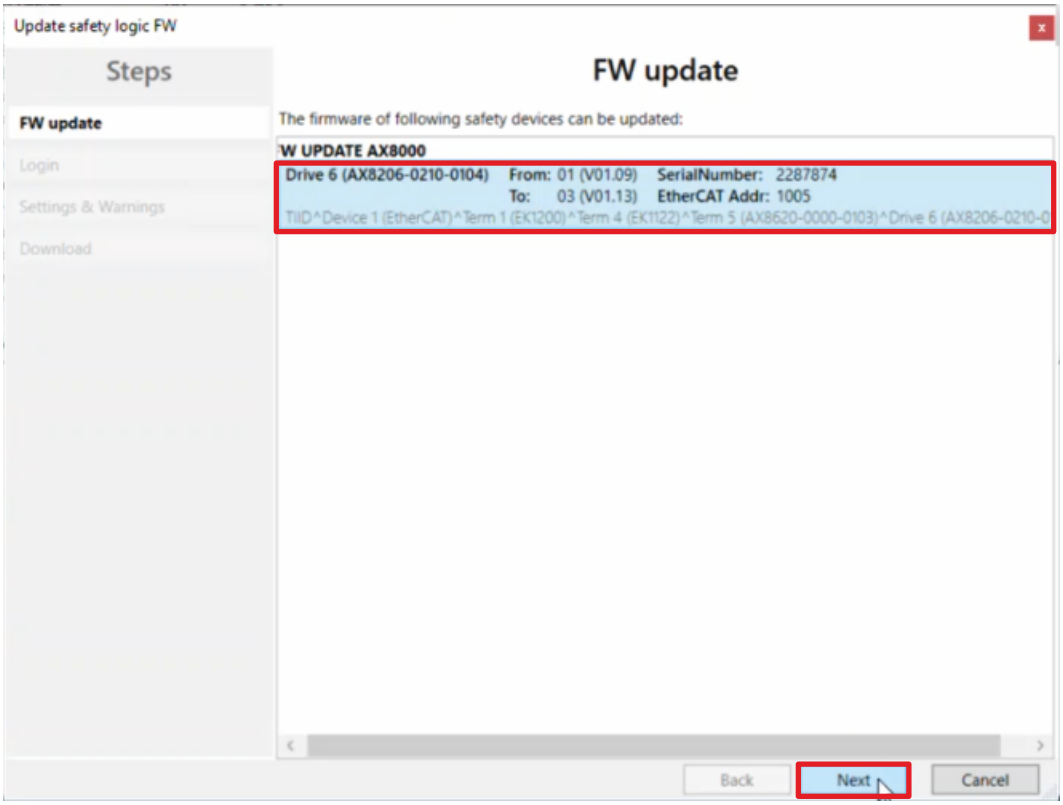
Proceed as follows to perform a FW update:



3. Open "TwinSAFE" tab

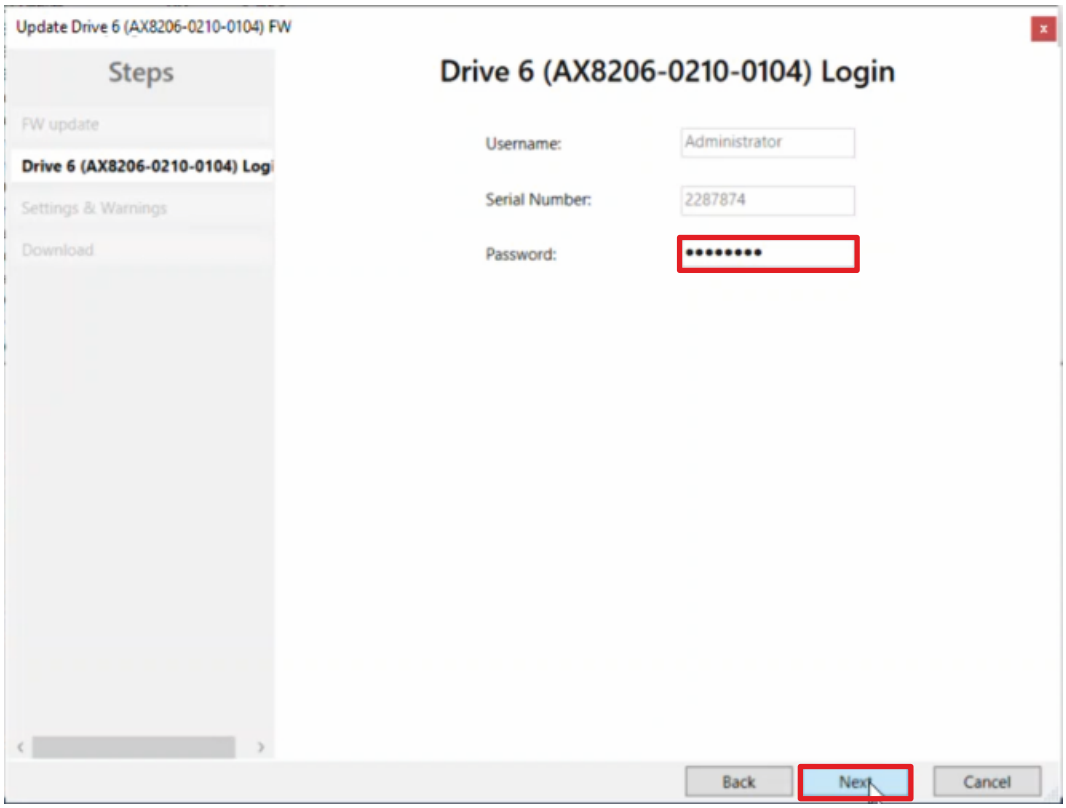


4. Click on "Start FW Update Wizard..." in the wizard field



The "FW update" window opens and shows you all components whose firmware you can update.

5. Select Safe Motion component
6. Confirm the selection with "Next"

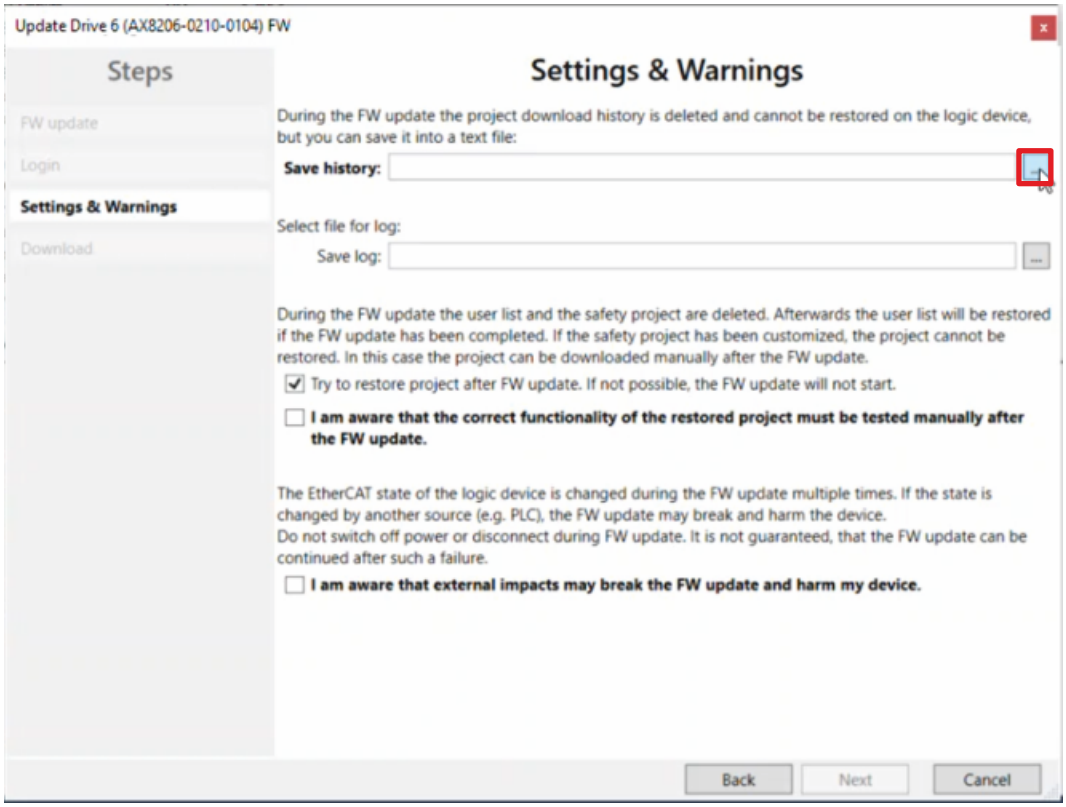


In the "Drive 6 (AX8206-0210-0104) Login" window, log in so that a FW update can be performed. The user name and serial number of the affected component will be found and displayed automatically.

7. Enter default password

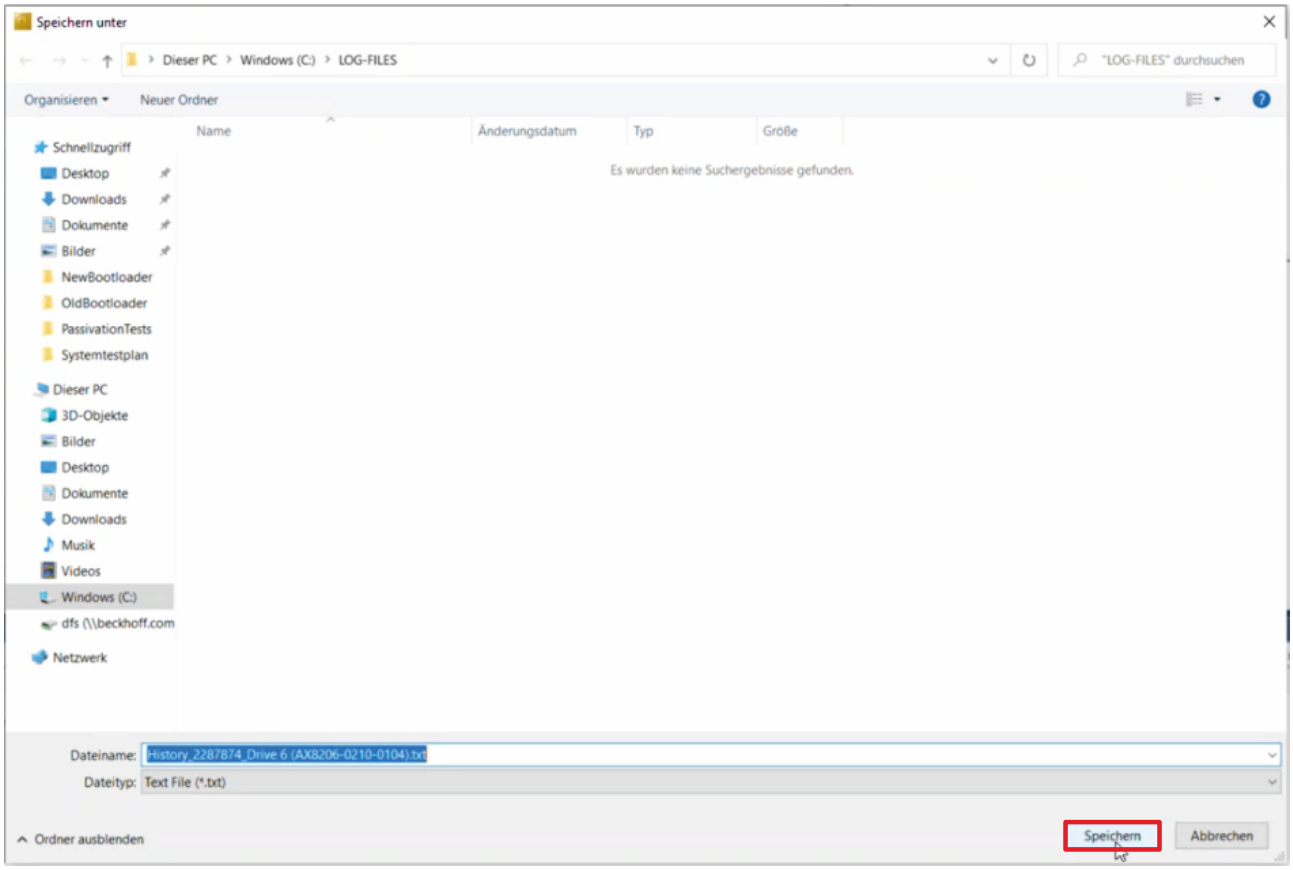
Default password: TwinSAFE

8. Confirm the login with "Next”

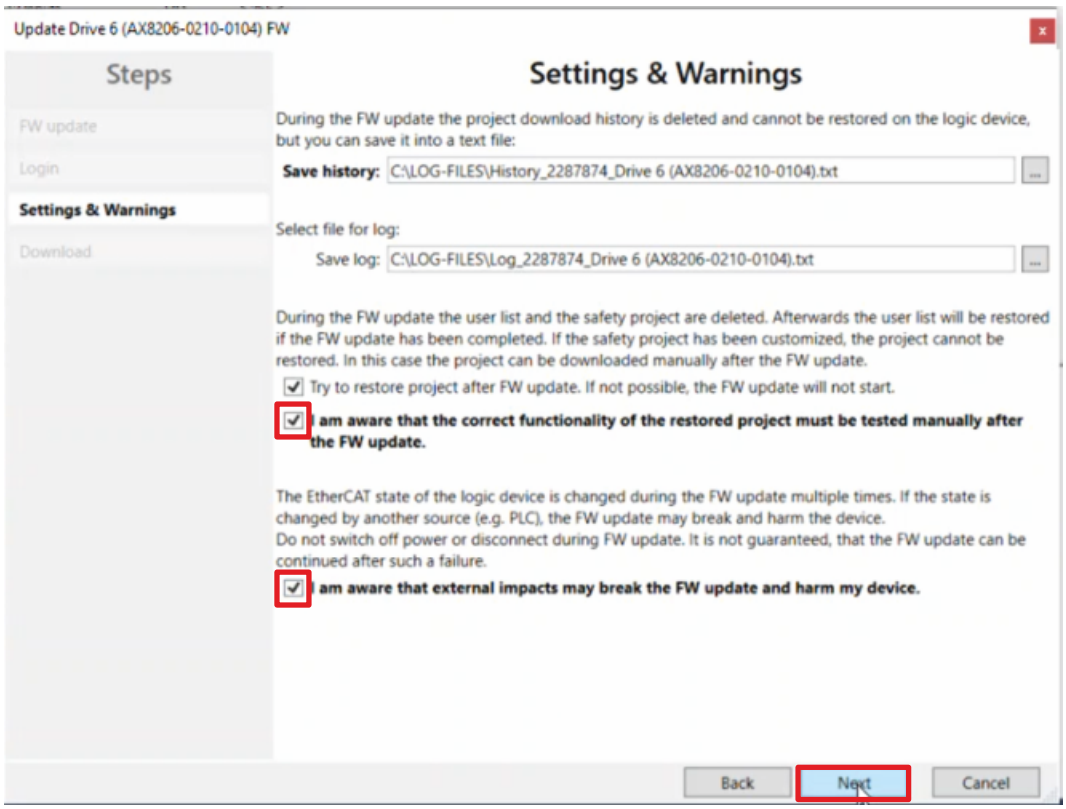


In the "Settings & Warnings" window you must select a storage location for the history and the log.

9. Click on the " ... " button for the history file

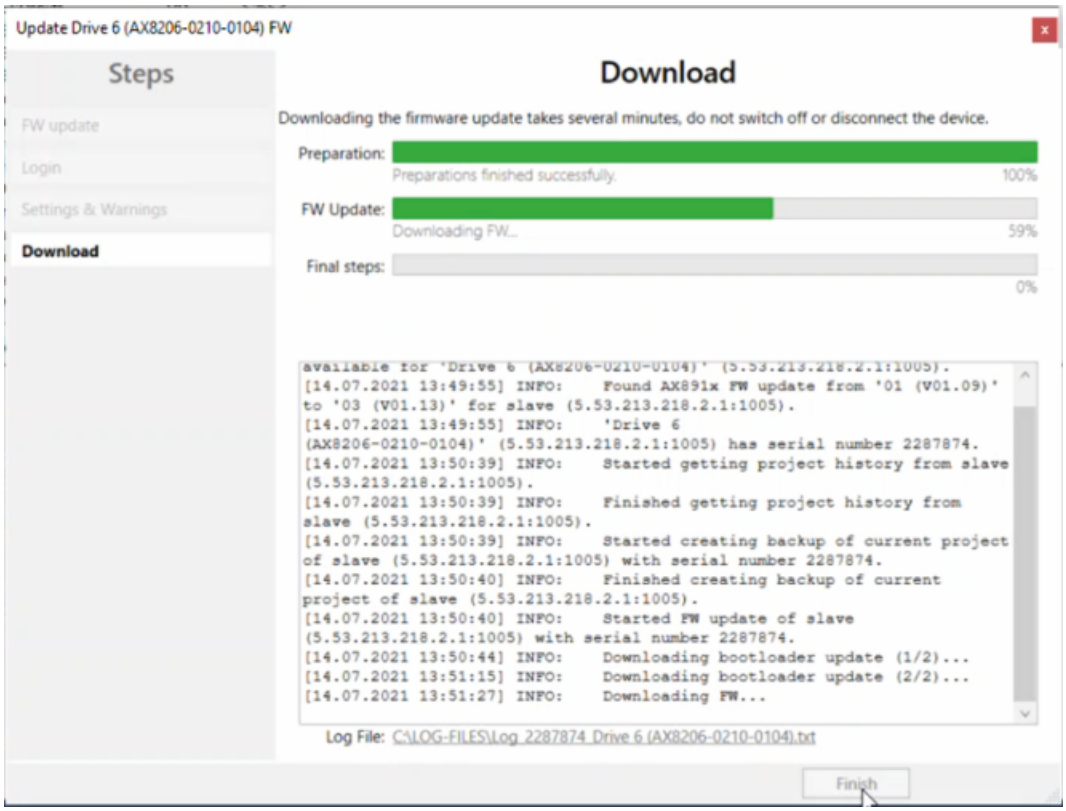


10. Select a file location
11. Confirm the selection with "Save"
12. Repeat steps 7 - 9 for the log file

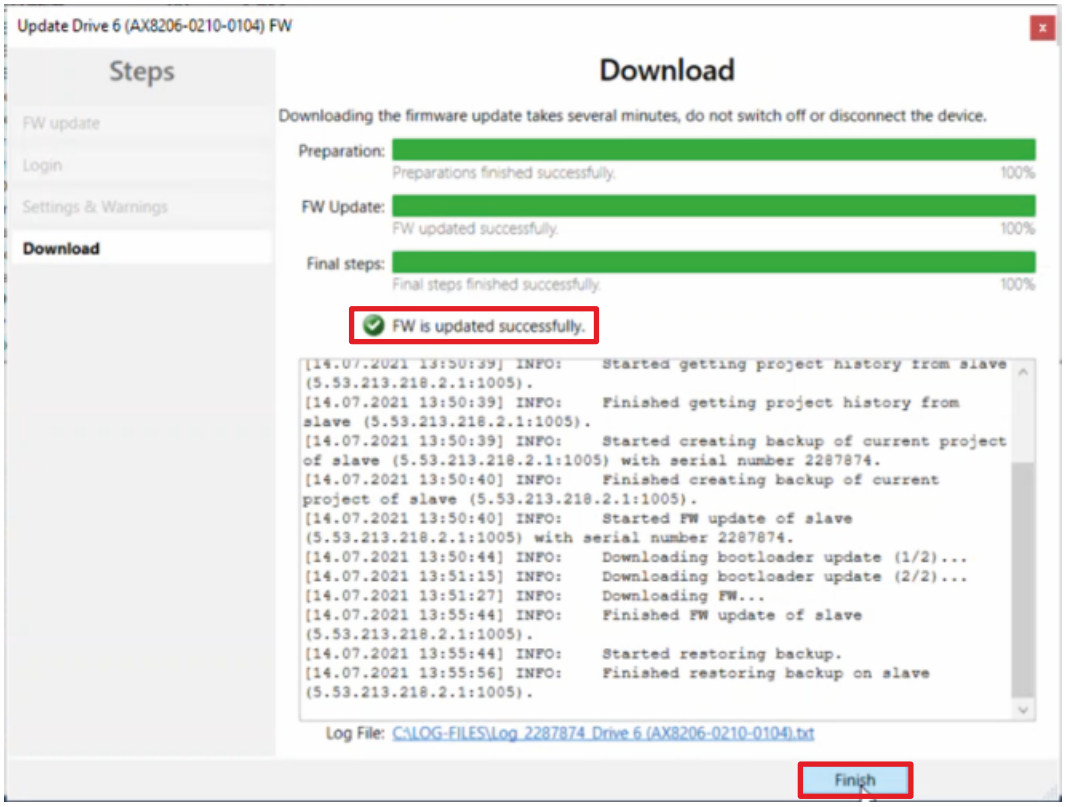


13. Check the following boxes in the "Settings & Warnings" window

- "I am aware that the correct functionality of the restored project must be tested manually after the FW update."
- "I am aware that external impacts may break the FW update and harm my device."



The download starts. The information you see in the window below the loading bars is transferred to the log file.



14. As soon as the message "FW is updated successfully." appears, close the window with "Finish"

More Information:
www.beckhoff.com/twinsafe/

Beckhoff Automation GmbH & Co. KG
Hülshorstweg 20
33415 Verl
Germany
Phone: +49 5246 9630
info@beckhoff.com
www.beckhoff.com