BECKHOFF New Automation Technology

TwinSAFE Tutorial 18 | EN

TwinSAFE Loader

Addition of a new target system

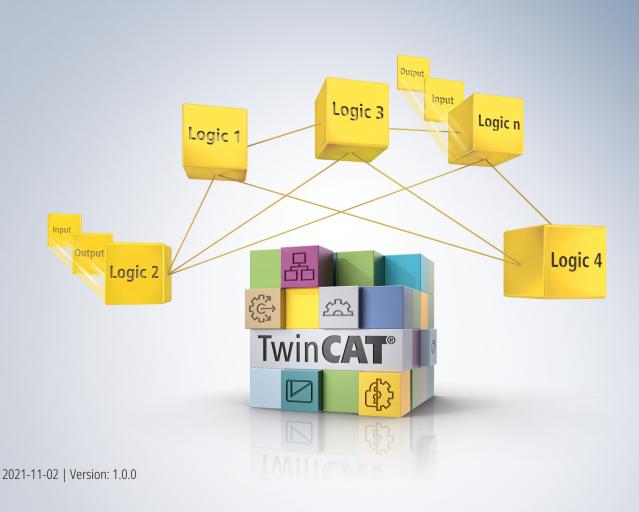




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Version: 1.0.0





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 18 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 addition of an AX8000 as a possible new target system for the TwinSAFE Loader.

1.1 Version numbers

Version	Comment
1.0.0	First released version
0.0.1	First draft

1.2 Requirements

Meet the following requirements for this tutorial:

- TwinCAT 3 version ≥ 3.x
- TwinSAFE Loader = p7
- Tutorial 16

1.3 Starting point

At the starting point of the tutorial

• a command line (CMD) exists.



1.4 Demo system

1.4.1 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
- Engineering system connected via Ethernet

1.4.2 Desired functionality

This tutorial describes the realization of the following functionality:

• Support of a new target system for the TwinSAFE Loader.



2 Demonstration

Proceed as follows to add an AX8000 as a new possible target system:

C:\TwinSAFE Loader Demo>TwinSAFE Loader.exe --gw 192.168.100.254 --list devices.csv

1. Enter command "list devices.csv" to open the list of devices of the I/O configuration

C:\TwinSAFE Loader Demo>notepad devices.csv

2. Enter command "notepad devices.csv" to open a notepad with the available devices



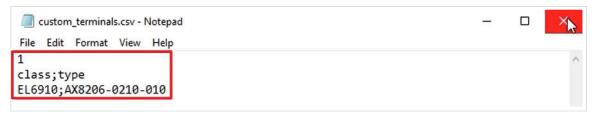
You can see, that the AX8000 hast not yet included in the device list.

3. Close notepad

C:\TwinSAFE Loader Demo>notepad custom_terminals.csv

4. Enter command "notepad custom terminals.csv"

You thus create a new file in which you enter the new target system.



5. Enter the target system according to the illustration

The exact information about the AX8000 type can be found in the I/O configuration in the detailed information about the AX8000.

- 6. Save entered data via Ctrl + S or via the context menu
- 7. Close notepad

C:\TwinSAFE Loader Demo>TwinSAFE_Loader.exe --gw 192.168.100.254 --list devices.csv

8. Re-enter command "list devices.csv" to open the list of devices of the I/O configuration

You can see, that the AX8000 is successfully listed.

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