

Alarmhandling at Festo Controllers

The Application Note describe the limitation of Alarm-configuration on Festo PLC with Codesys runtime 3.5.15.x

CPX-E-CEC
CPX-CEC-*-V3

Title Alarmhandling_at Festo_Controllers
Version 1.10
Document no. 100368
Originalen
AuthorFesto

Last saved 03.03.2022

Copyright Notice

This documentation is the intellectual property of Festo SE & Co. KG, which also has the exclusive copyright. Any modification of the content, duplication or reprinting of this documentation as well as distribution to third parties can only be made with the express consent of Festo SE & Co. KG.

Festo SE & Co KG reserves the right to make modifications to this document in whole or in part. All brand and product names are trademarks or registered trademarks of their respective owners.

Legal Notice

Hardware, software, operating systems and drivers may only be used for the applications described and only in conjunction with components recommended by Festo SE & Co. KG.

Festo SE & Co. KG does not accept any liability for damages arising from the use of any incorrect or incomplete information contained in this documentation or any information missing therefrom.

Defects resulting from the improper handling of devices and modules are excluded from the warranty.

The data and information specified in this document should not be used for the implementation of safety functions relating to the protection of personnel and machinery.

No liability is accepted for claims for damages arising from a failure or functional defect. In other respects, the regulations with regard to liability from the terms and conditions of delivery, payment and use of software of Festo SE & Co. KG, which can be found at www.festo.com and can be supplied on request, shall apply.

All data contained in this document do not represent guaranteed specifications, particularly with regard to functionality, condition or quality, in the legal sense.

The information in this document serves only as basic information for the implementation of a specific, hypothetical application and is in no way intended as a substitute for the operating instructions of the respective manufacturers and the design and testing of the respective application by the user.

The operating instructions for Festo products can be found at www.festo.com.

Users of this document (application note) must verify that all functions described here also work correctly in the application. By reading this document and adhering to the specifications contained therein, users are also solely responsible for their own application.

Table of contents

- 1 Components/Software used 5**
- 2 Introduction 6**
- 2.1 Add Alarm Configuration 6
 - 2.1.1 Full functionality 7
 - 2.1.2 Functionality on Festo controllers 7
- 2.2 Usage on Festo controllers 7
- 3 Limitations..... 8**

1 Components/Software used

Type/Name	Version Software/Firmware	Date of manufacture
Codesys	3.5.15.40	

Table 1.1: 1 Components/Software used

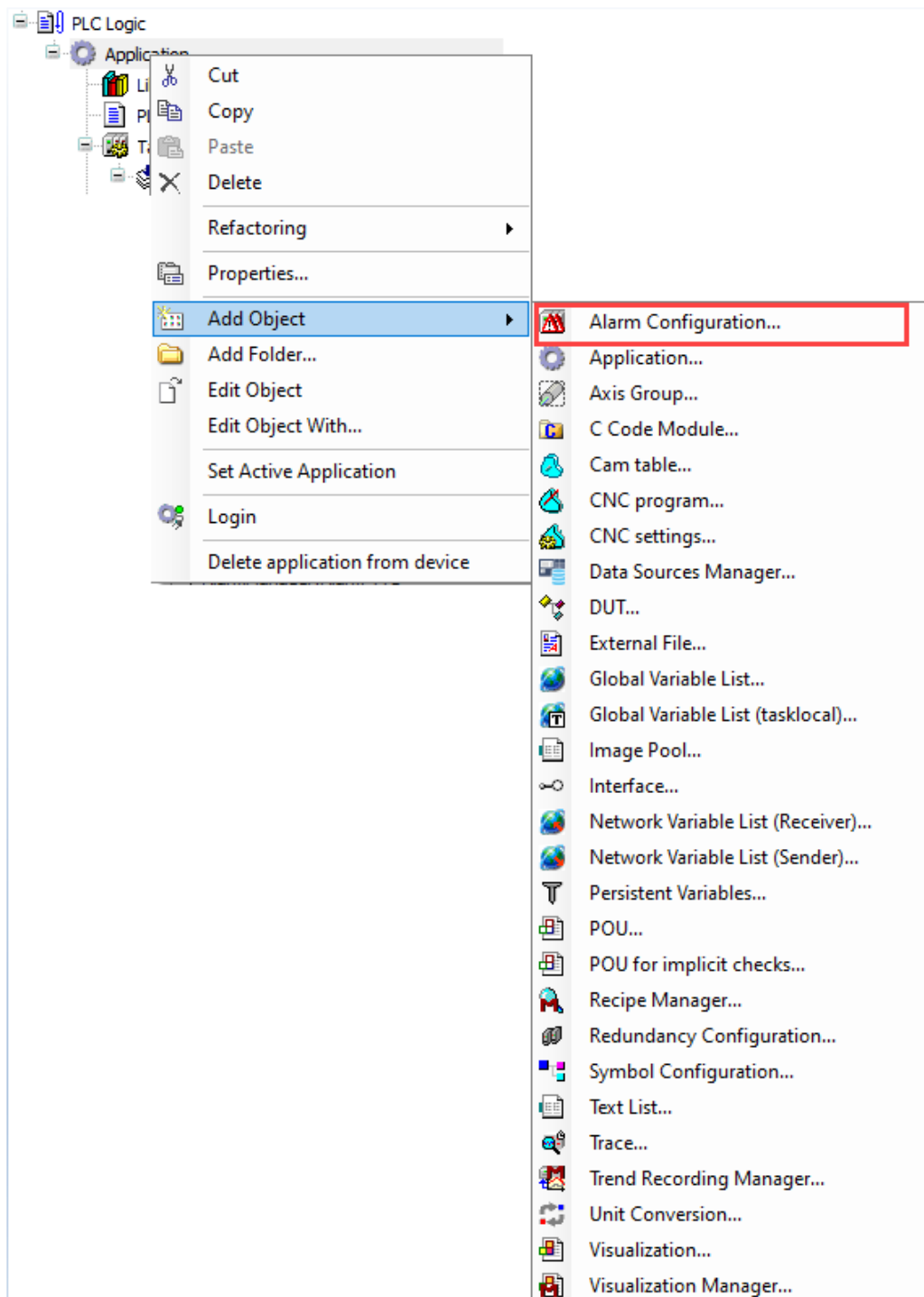
2 Introduction

The **Alarm Configuration** on Festo Controllers is available since Codesys V3.5 SP15 Patch 4. On Festo controllers the usage of the **Alarm Configuration** option doesn't support the complete functionality. The storage option is disabled, because this option uses a lot of flash memory not only for the storage database but also for the storage functionality in the runtime. In the following the supported functions and the limitations will be described. The **Alarm Configuration** itself works without limitations, but no history can be saved. The visualisation elements of the **Alarm Manager** cannot be used, because these elements need the storage functionality of the **Alarm Configuration**.

2.1 Add Alarm Configuration

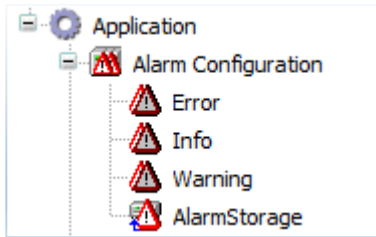
The Alarm Configuration is an option which can be activated in a Codesys project.

In a Codesys project, open the context menu by right mouse click on the Application, choose: **Alarm Configuration**.



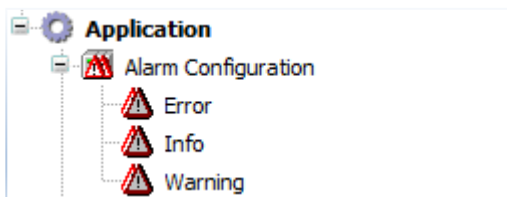
2.1.1 Full functionality

The picture shows the full basic **Alarm Configuration** with **AlarmStorage** option.



2.1.2 Functionality on Festo controllers

The picture shows the limited **Alarm Configuration** without the **AlarmStorage** option



2.2 Usage on Festo controllers

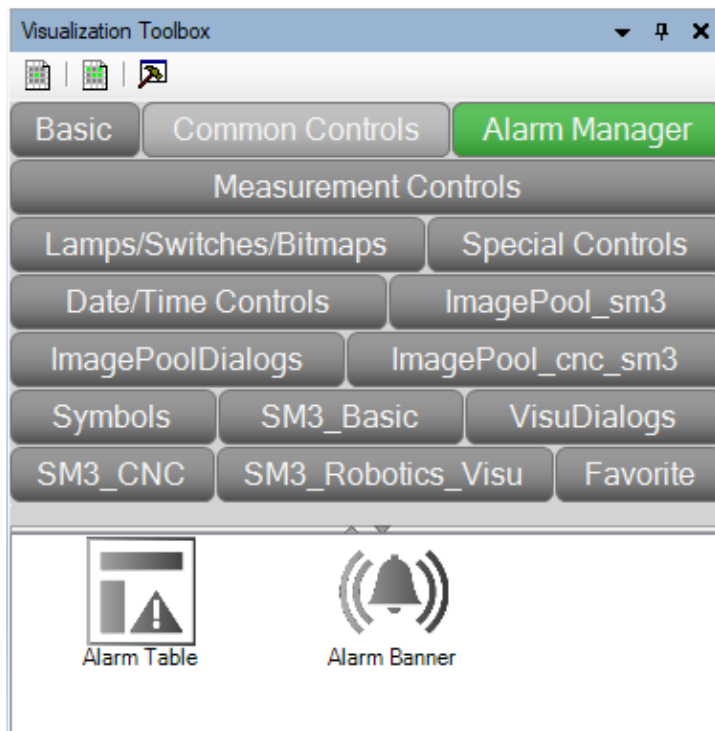
On Festo Controllers the Alarm handling can only be used **without** the storage option. Mainly the Alarm handling is used by the OPC UA-Server. The OPC UA-Server uses the Alarm handling for error messaging.

3 Limitations

The **AlarmManager** visualisation elements are using the **Alarm Configuration** functionality.

The **AlarmManager** has two Elements:

- AlarmTable
- AlarmBanner



The visualisation elements of the **AlarmManager** can't be used on Festo Controllers. If one of these two elements is used in a visualisation, an error occurs at downloading the project to the controller. These two elements use implicitly the functions of the CAA Storage library.

AlarmManager = AlarmManager, 3.5.16.10 (Intern)	AlarmManager	3.5.16.10
Alarm Manager Interfaces, * (Intern)	AlarmManager_Interfaces	3.5.16.0
Alarm Manager Internal Interfaces, * (Intern)	AlarmManagerInternal_Interfaces	3.5.16.0
Base Interfaces, * (System)	IBaseLibrary	3.5.2.0
CAA Storage = CAA Storage, 3.5.13.0 (CAA Technical Workgroup)	STO	3.5.13.0
CAA Storage Imp = 3S Storage, 3.5.13.0 (3S - Smart Software Solutions GmbH)	STI	3.5.13.0

The counterparts of these functions are not implemented in the runtime. This leads to the following error message:

