

Platform MX6

Software option S108

CODESYS EtherNet/IP Adapter

1 Identification

Identification	
Option ID	S108
Order number	S-05000310-0000
Short name	CODESYS EtherNet/IP Adapter
Brief description	With this software option, it is possible to integrate the control as an EtherNet/IP Adapter (Slave) in an EtherNet/IP network.
Revision ID document	V3.0

2 System requirements and restrictions

System requirements and restrictions	
Supported platforms and devices	Berghof PLC devices of the MX6 platform (e.g.: MCs, CCs, DCs) Additional information regarding availability and compatibility can be found in options section of the product catalog.
Firmware	MX6-PLC from version 1.16.0, CODESYS from 3.5 SP10 Patch 1
Additional requirements	— Ethernet port
Restrictions	—

3 Product description

This software option activates the license for the in CODESYS integrated EtherNet/IP Adapter (Slave) for the device. The EtherNet/IP Adapter expansion is based on the implementation of the company 3S for CODESYS.

With the EtherNet/IP configurator, the CODESYS development system supports the project planning of EtherNet/IP Networks. The configurator allows that all EtherNet/IP settings for the EtherNet/IP Adapter can be comfortable set. With the EtherNet/IP Adapter, it is possible to exchange data with EtherNet/IP Scanners inside the network. All parameters for communication are predefined in the configurator. An Adapter-EDS-file can be created out of the CODESYS IDE.

For full documentation of the different Ethernet/IP Adapter and Module configuration menus please check the CODESYS Online help under:

https://help.codesys.com/webapp/enic_f_adapter;product=core_EthernetIP_Configuration_Editor;version=3.5.15.0

4 Technical data

Technical data	
Conformity	ODVA tested
Compatibility	Combination with Ethernet/IP scanner possible

5 Quick Start Guide

With this illustrated quick start guide it is possible to create a functional Ethernet/IP adapter within a few minutes.

5.1 Preparatory tasks

In the web configuration of the PLC the „Static“ mode for the ETH1 interface in the „Network Configuration menu“ has to be selected. The ETH0 interface can't be in the same subnet while using Ethernet/IP. Save the configuration and reboot the PLC to activate the settings.

Configuration

Network

[CAN](#)

[Time and Date](#)

[Display](#)

[FTP-Server](#)

[SSH-Server](#)

[WEB-Server](#)

[Users](#)

[SVC Config](#)

[Config Protection](#)

[Reset Config](#)

System

[Info](#)

[Licenseinfo](#)

[Screenshot](#)

[Update](#)

[Reboot](#)

PLC-Manager

[Control](#)

[Config](#)

[Application Info](#)

[Application Files](#)

[Font Files](#)

Diagnostics

[PLC Log](#)

[System Log](#)

[Ethernet](#)

[CAN](#)

[Storage](#)

[System Dump](#)

Network Configuration

COMMON

Hostname

DNS Server 1

DNS Server 2

ETH0

Mode:

IPAddress

NetMask

Gateway

ETH0:1

Mode:

ETH1

Mode:

IPAddress

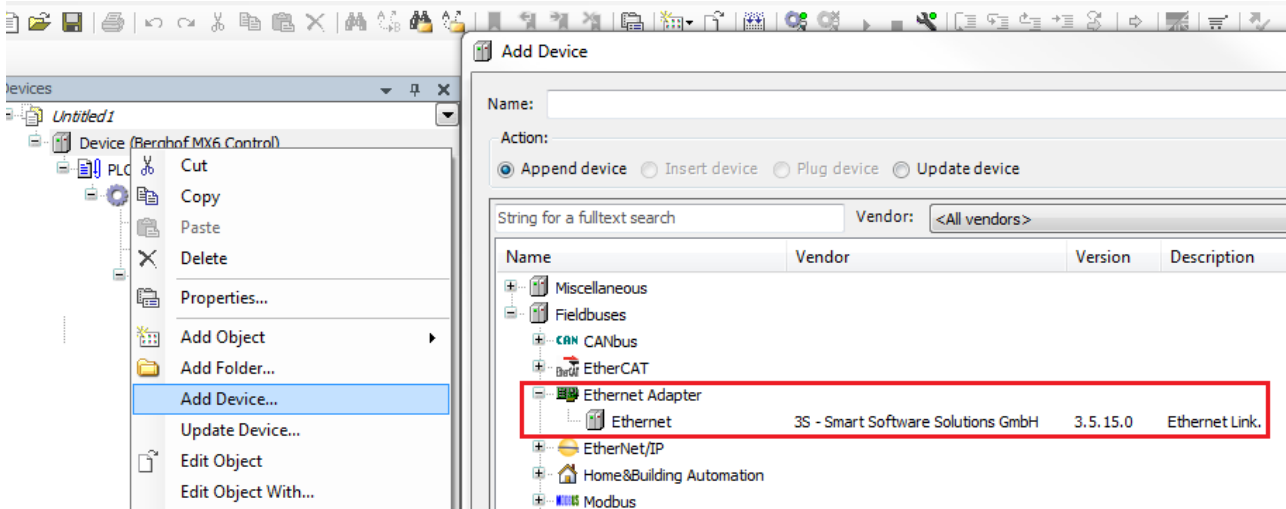
NetMask

Gateway

ETH1:1

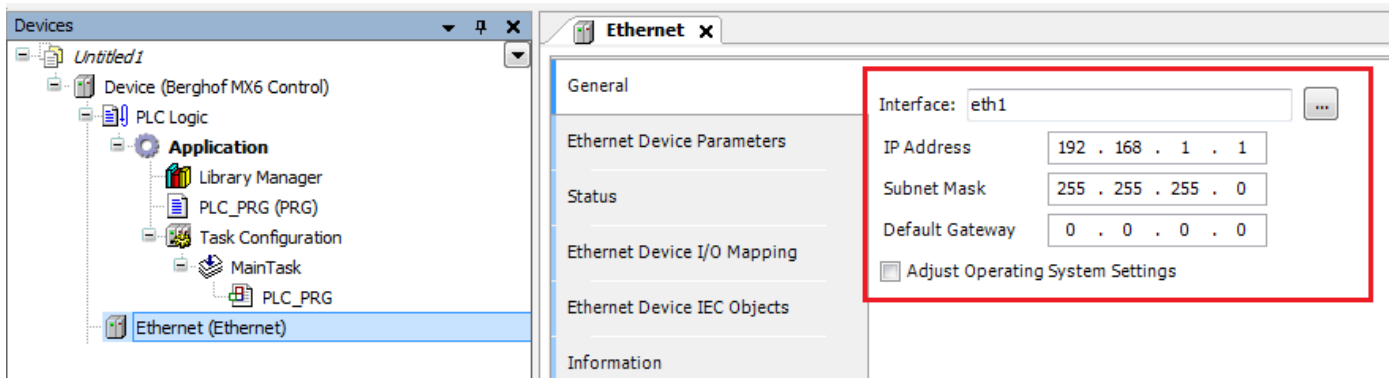
5.2 Addition of the ethernet adapter

At first an ethernet adapter has to be integrated into the CODESYS project, through the CODESYS function “Add Device” by right clicking on the PLC-Device in the devices window in CODESYS.



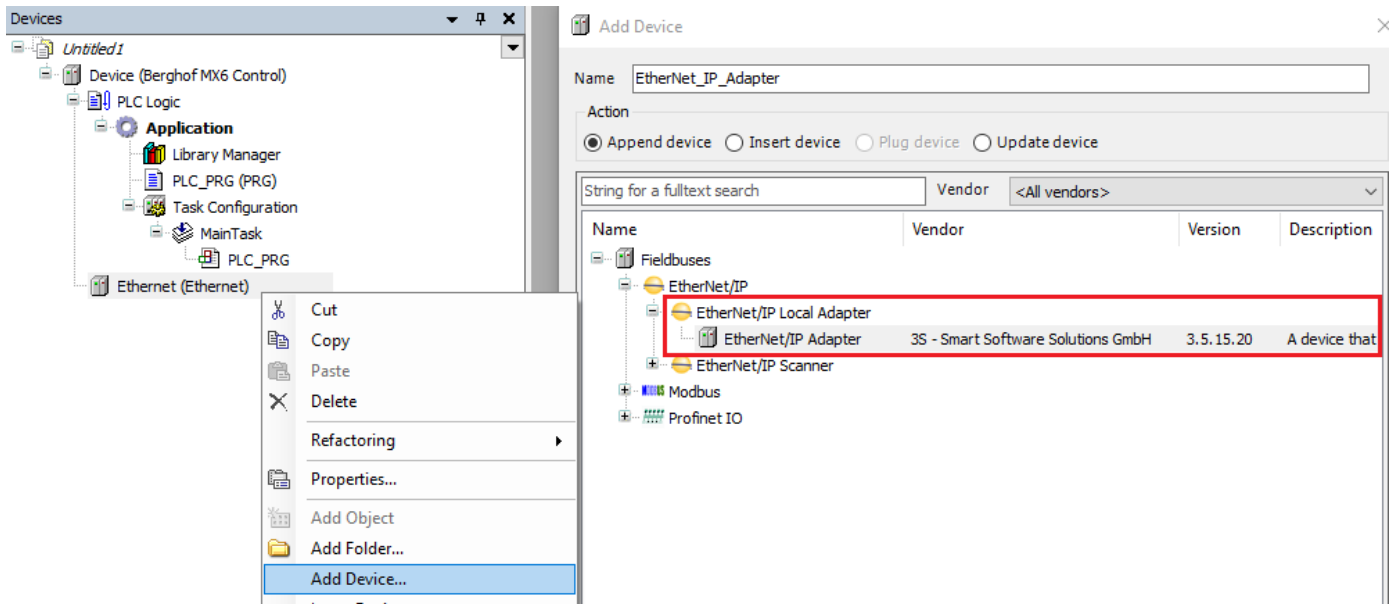
5.3 Configuration of the ethernet adapter

With a double click on the newly added Ethernet adapter you can open the configuration. Set the Ethernet interface and IP settings same as configured in the webinterface.



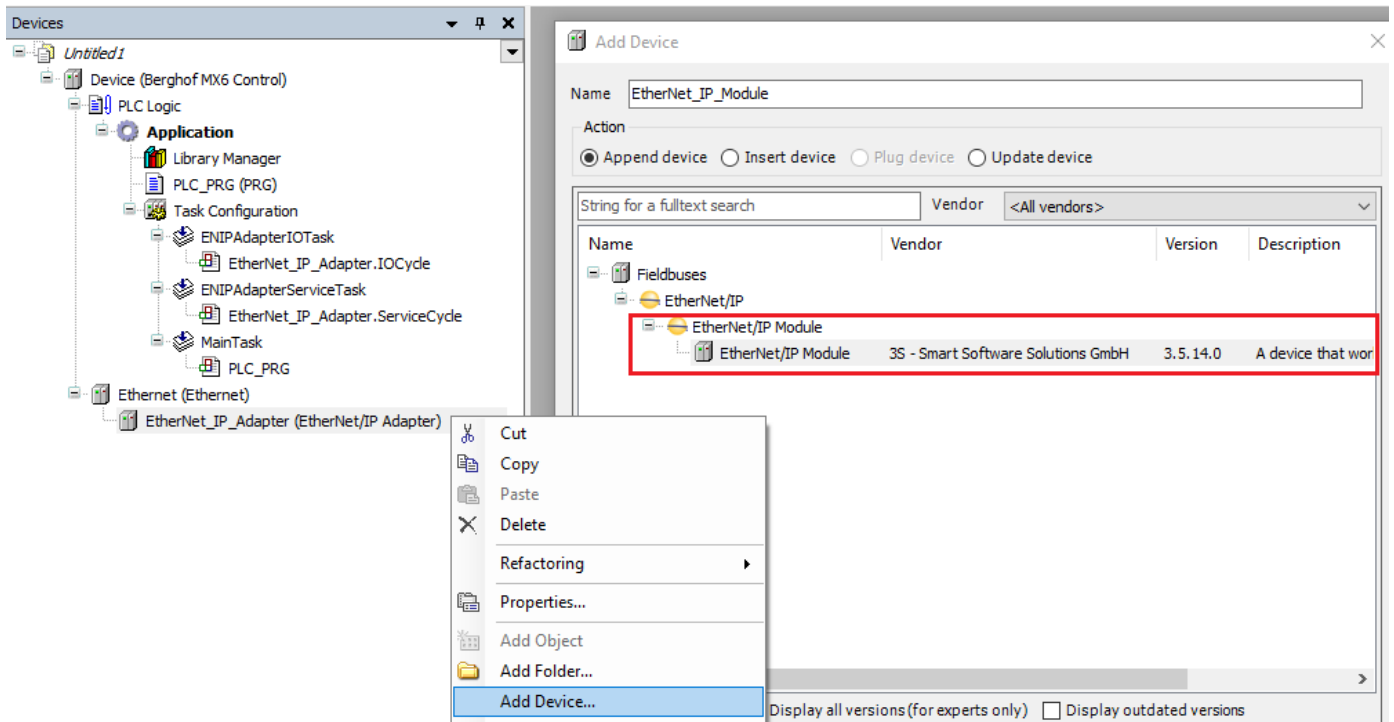
5.4 Addition of the Ethernet/IP Adapter

After that the Ethernet/IP Adapter can be added under the ethernet adapter via „Add Device“.



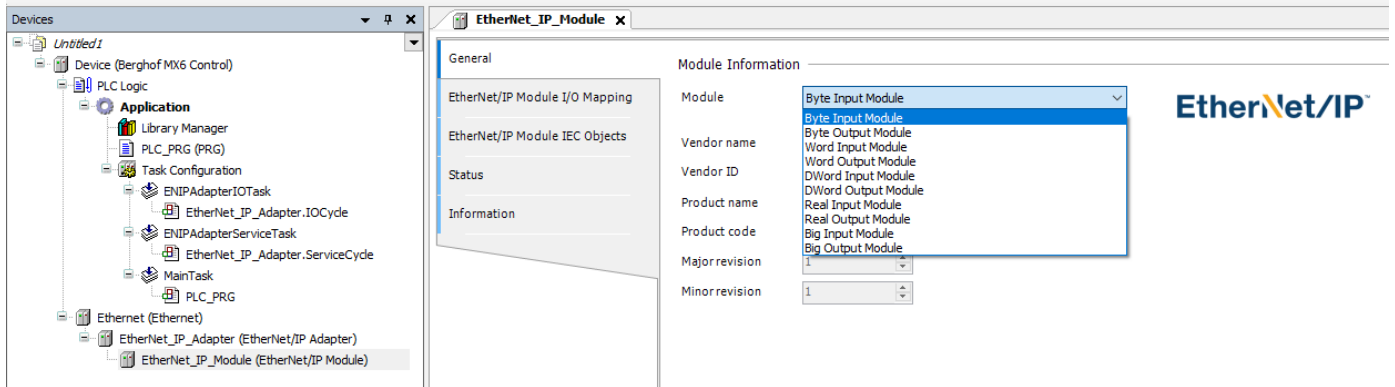
5.5 Addition of Ethernet/IP Modules

Depending on the desired configuration, one or more Ethernet/IP Modules must then be added to the Ethernet/IP Adapter with "Add Device".



5.6 Configuration of the Ethernet/IP Module

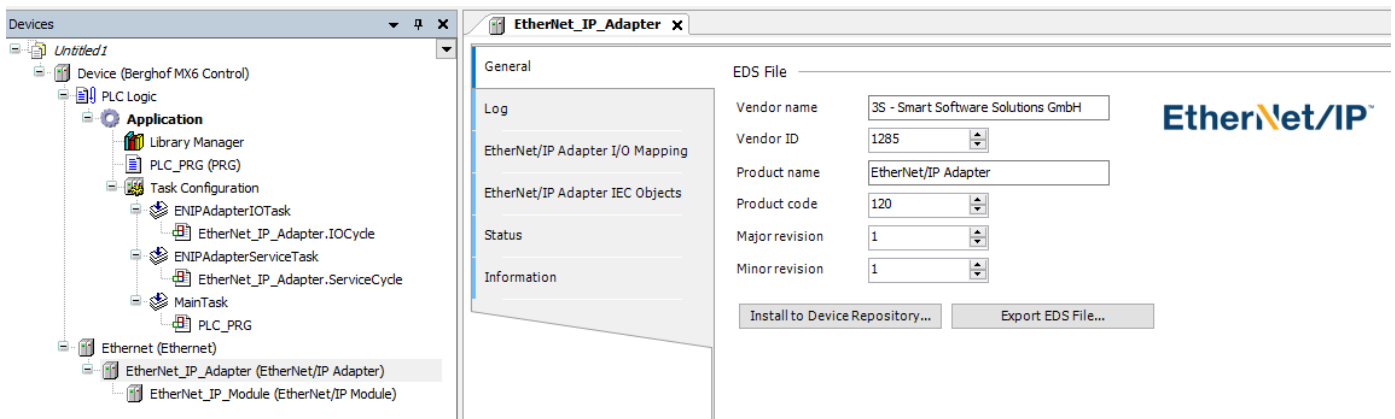
With a double click on the newly added Ethernet/IP Module you can open the device configuration. Under „Module“ you set the data type of the module and whether it is an input or output value.



Repeat adding and configuring Ethernet/IP Modules until you have all data you want to communicate via Ethernet/IP in your I/O image.

5.7 Configuration of the Ethernet/IP Adapter

With a double click on the Ethernet/IP Adapter you can open the device configuration after the module configuration. Here you can set the device information such as manufacturer, product name, etc. and automatically generate an EDS file matching the adapter and module configuration. The EDS file then allows easy integration into an Ethernet/IP scanner.



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