Platform MX6
Software option S107
CODESYS EtherNet/IP Scanner

1   Identification

Identification	
Option ID	S107
Order number	S-05000309-0000
Short name	CODESYS EtherNet/IP Scanner
Brief description	With this software option, it is possible to integrate EtherNet/IP based slave devices (Adapter) into the IO image.
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 scanner (master) for the device.
The EtherNet/IP scanner 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 to parameterize the EtherNet/IP network and that the EtherNet/IP adapter (slave) is integrated into the application. Data can be exchanged with the connected adapters through the IO image.
An acyclic access on remote Adapters is possible with the supplied service library.

For full documentation of the different Ethernet/IP Scanner and Adapter configuration menus please check the CODESYS Online help under:
https://help.codesys.com/webapp/_enic_f_scanner;product=core_EthernetIP_Configuration_Editor;version=3.5.15.0

4   Technical data

Technical data	
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 Scanner 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.
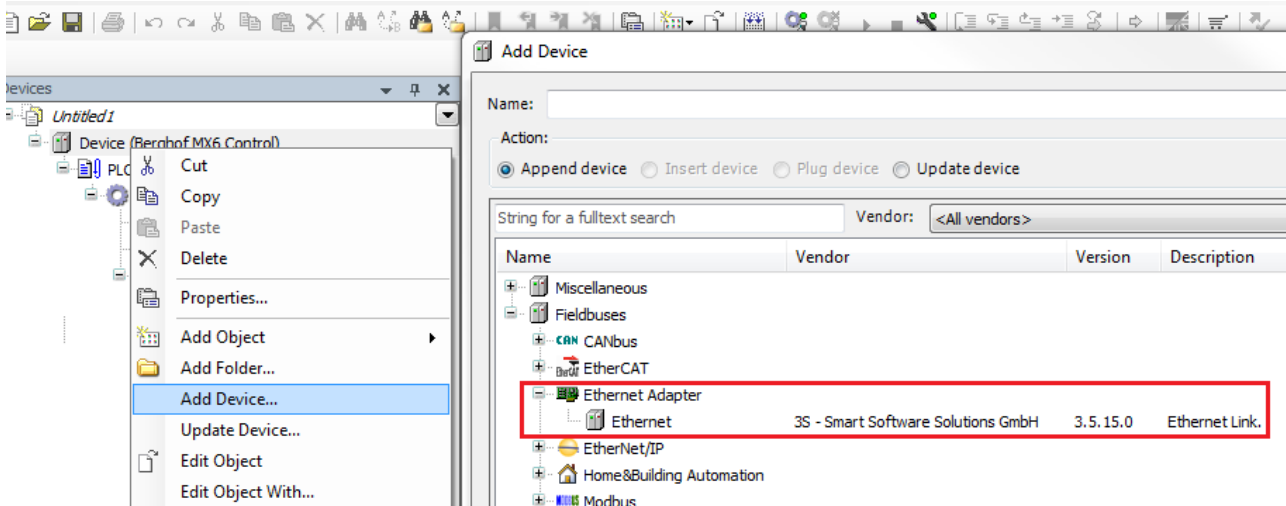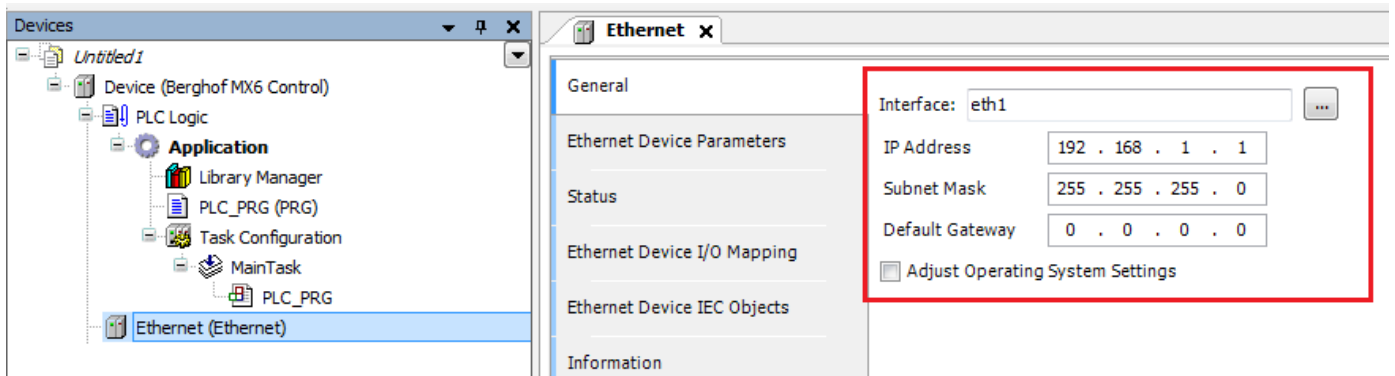
5.2 Addition of the ethernet adapter

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.
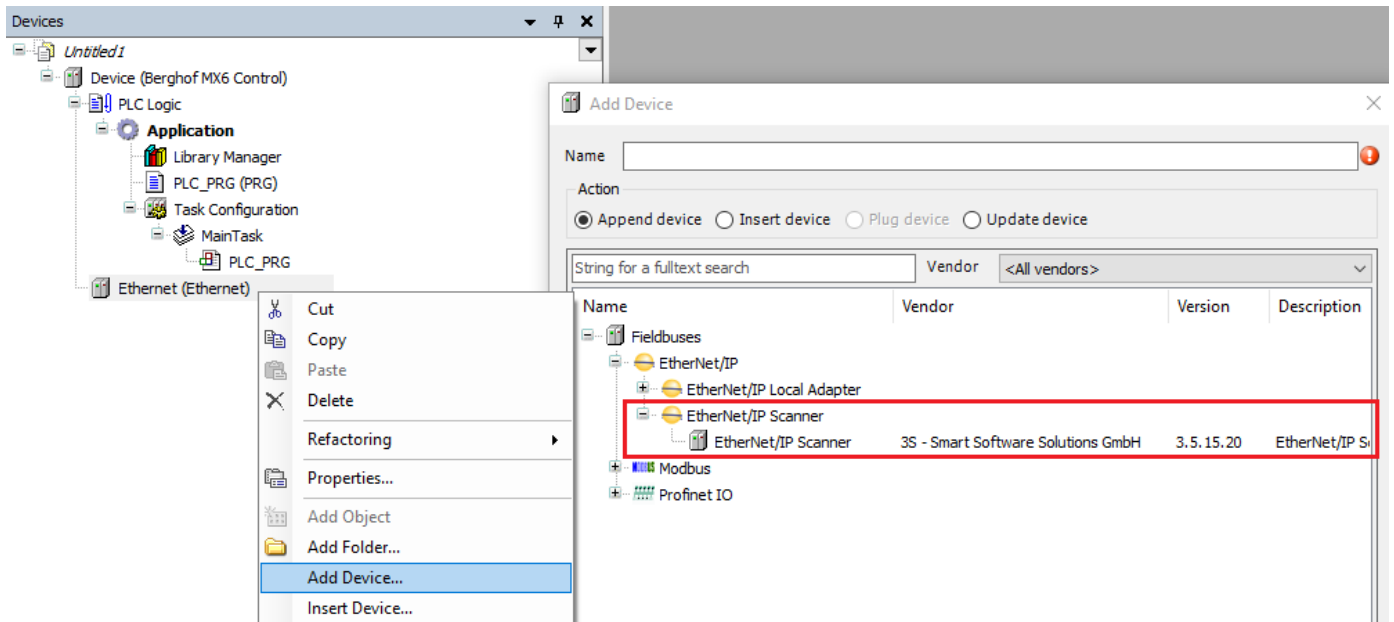

5.3 Configuration of the ethernet adapter

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.
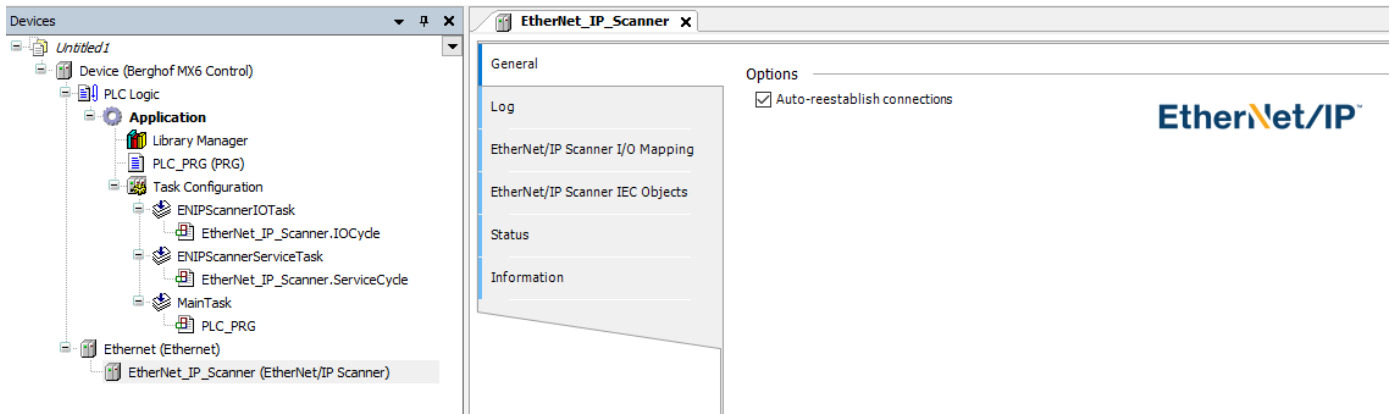
5.4 Addition of the Ethernet/IP Scanner

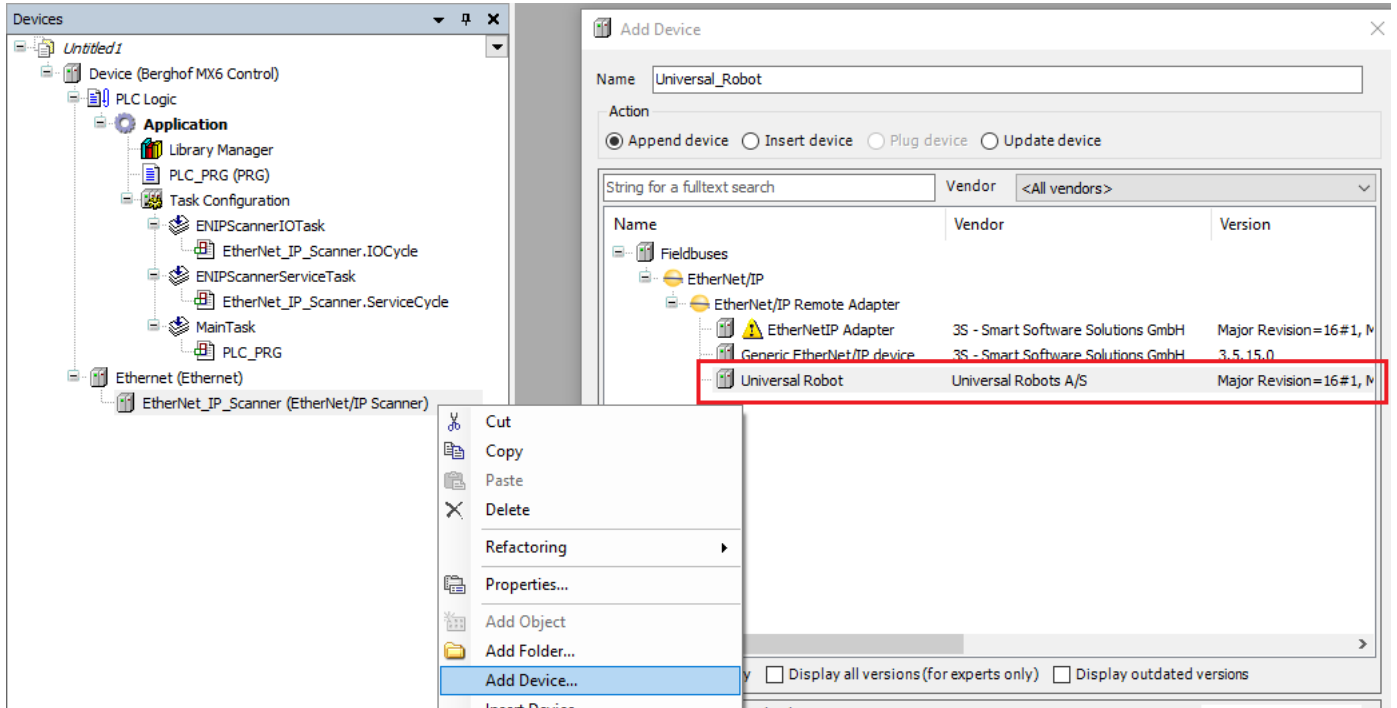After that the Ethernet/IP Scanner can be added under the ethernet adapter.

5.5 Configuration of the Ethernet/IP Scanner

With a double click on the newly added Ethernet/IP Scanner, you can open the configuration.
The only option available is to reestablish connections to Ethernet/IP adapters automatically.
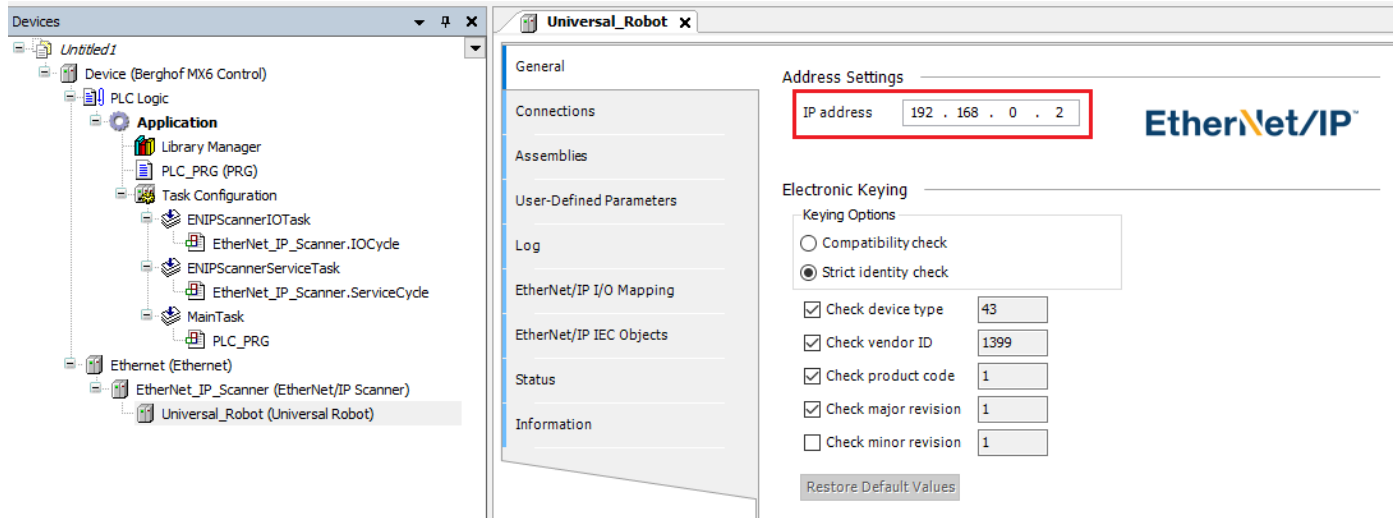
5.6 Addition of the Ethernet/IP Adapter

By using the "Add Device" function on the Ethernet/IP Scanner it is now possible to add your Ethernet/IP Adapters (devices).
Please be aware that your Ethernet/IP Adapater will only be shown in the device list the hardware description file (EDS) has been installed in CODESYS.

5.7 Configuration of the Ethernet/IP Adapter

With a double click on the newly added Ethernet/IP Adapter, you can open the configuration.
Check that the IP of the Ethernet/IP Adapter is set the same as the actual device and check the Keying Options.

Repeat the adding and configuration of Ethernet/IP Adapters until the device configuration in CODESYS matches the real hardware configuration which is connected to the PLC. When this is done download the project onto the PLC and start the application.