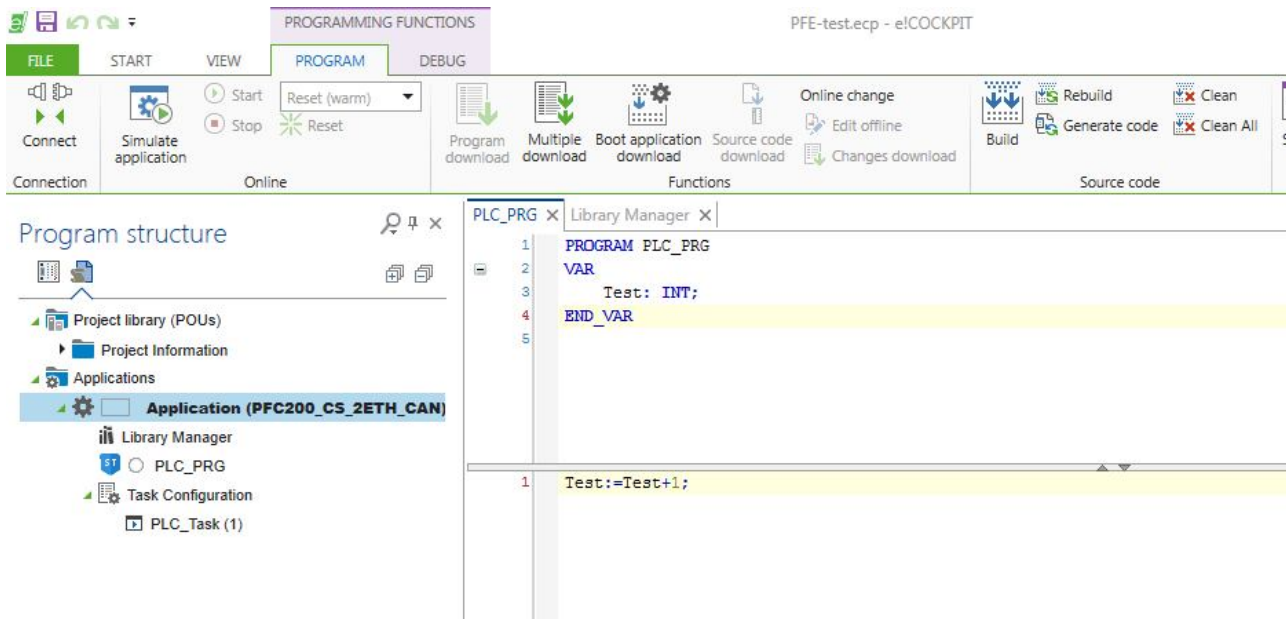


GP-PRO EX – Communication with Wago PFC200 by CoDeSys V3

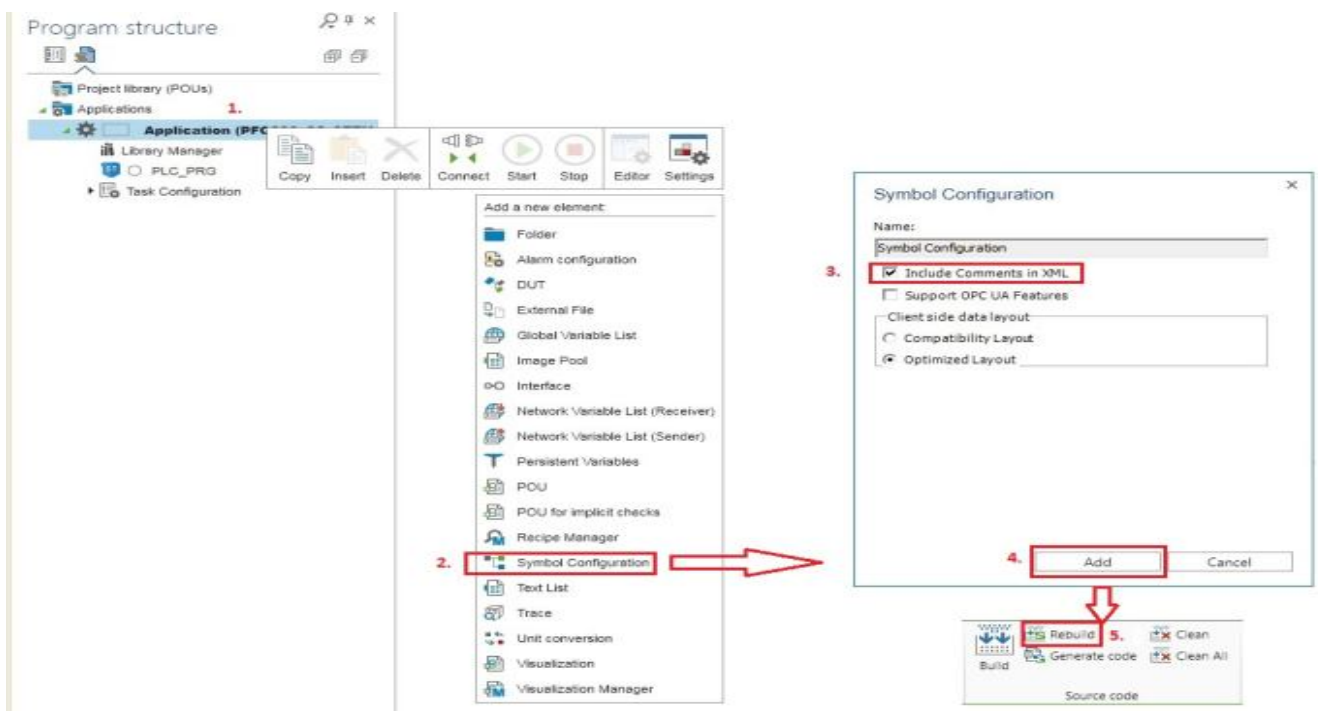
Wago PFC200 PLC CONFIGURATION

To program this PLC WAGOs **eCockpit** Development Environment editor was used.

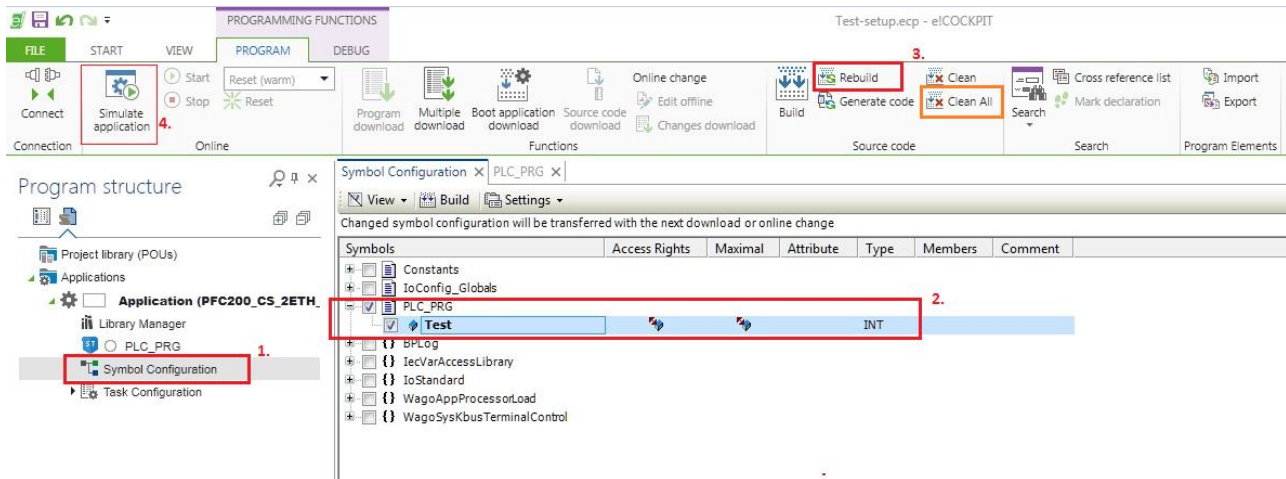
Create a simple program and declare a test Integer:



Right click on **Application** and it will open this drop down window. Click “**Symbol Configuration**” and select “**Include comments in XML**”, then click “**Add**”, then **Rebuild** the project.



You will get a new item **"Symbol configuration"** for your Application. Click it and select all the symbols you want to export to the XML file. **Rebuild** the project again. It might be necessary to do a **"Clean All"** first. The XML file will be (re-)build with the next download/online change or run of **"Simulate application"**.



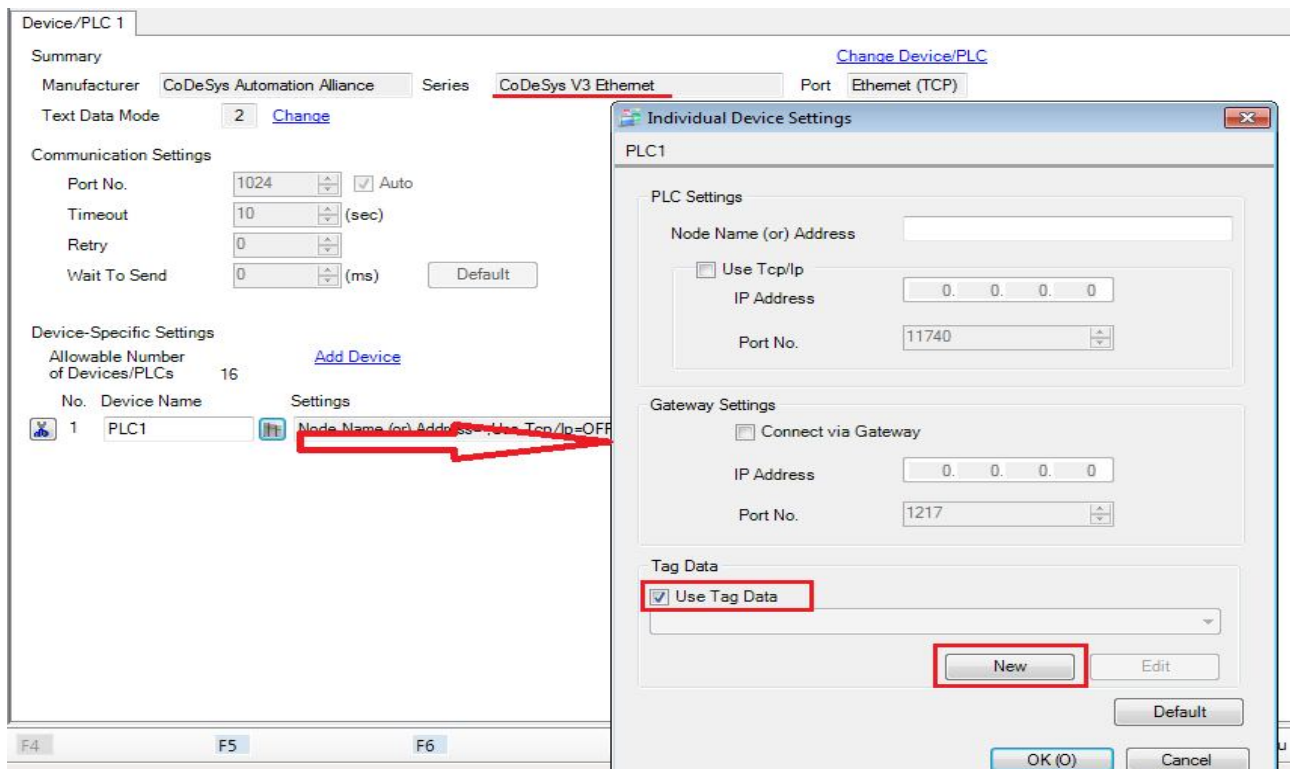
The XML file should look like this:

```
<?xml version="1.0" encoding="UTF-8"?>
- <Symbolconfiguration xmlns="http://www.3s-software.com/schemas/Symbolconfiguration.xsd">
  - <Header>
    <Version>3.5.7.0</Version>
    <SymbolConfigObject version="3.5.7.0"/>
    <ProjectInfo appname="Application" devicename="PFC200_CS_2ETH_CAN" name="PFE-test"/>
  </Header>
  - <TypeList>
    <TypeSimple name="T_INT" iecname="INT" typeclass="Int" swapsize="2" size="2"/>
  </TypeList>
  - <NodeList>
    - <Node name="Application">
      - <Node name="PLC_PRG">
        <Node name="Test" access="ReadWrite" type="T_INT"/>
      </Node>
    </Node>
  </NodeList>
</Symbolconfiguration>
```

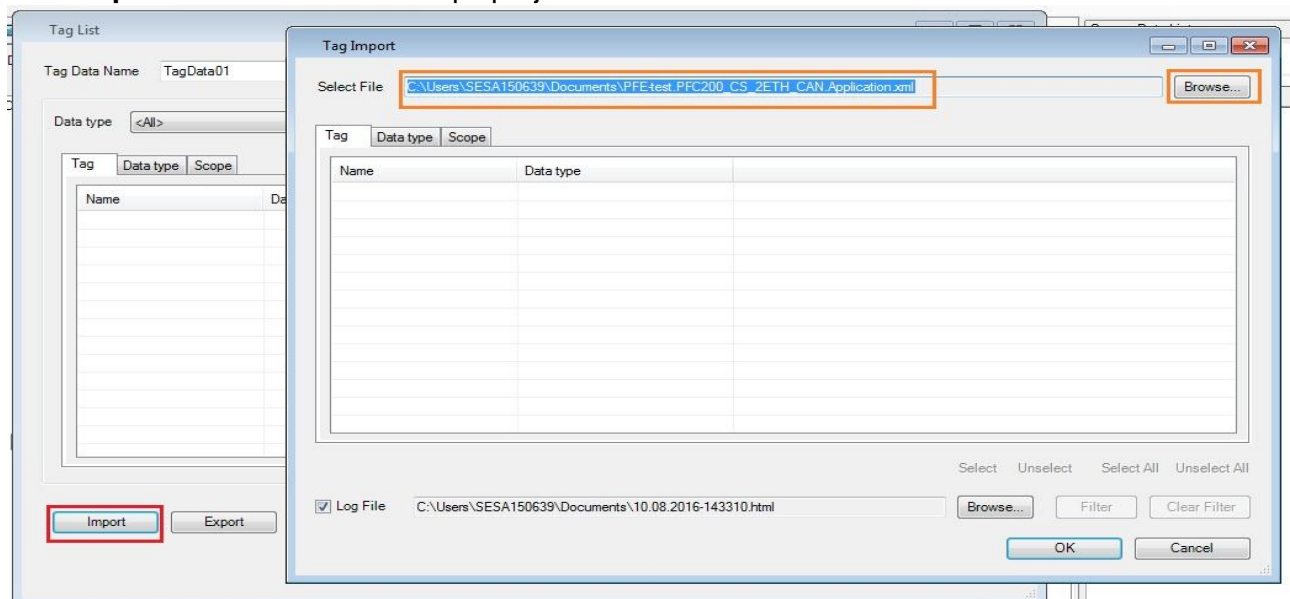
GP ProEX SETTINGS

Device/PLC Configuration:

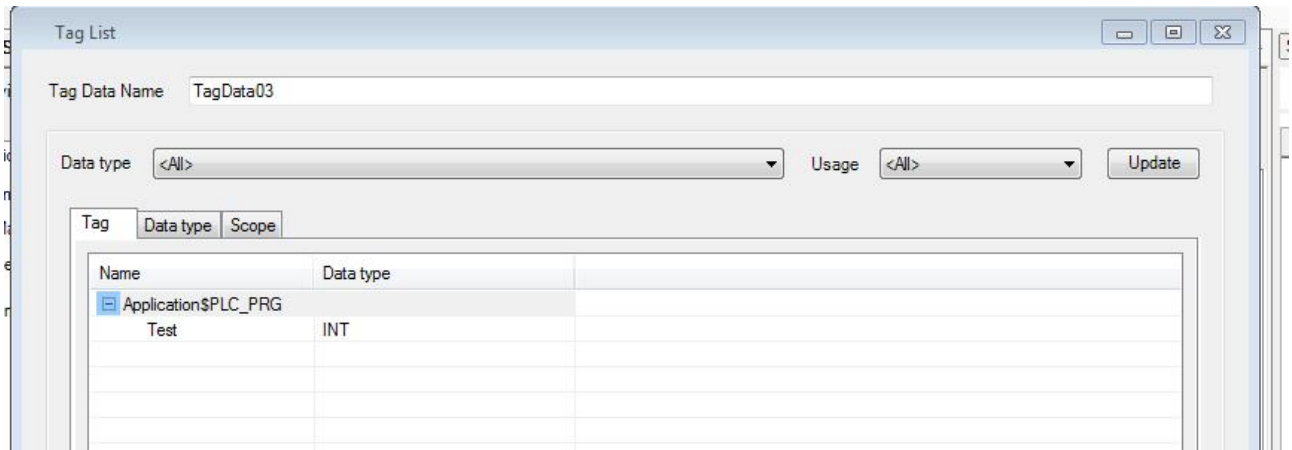
Select the **CoDeSys V3 Ethernet** driver, check **Use tag Data** in Individual Device Settings and click **New**.



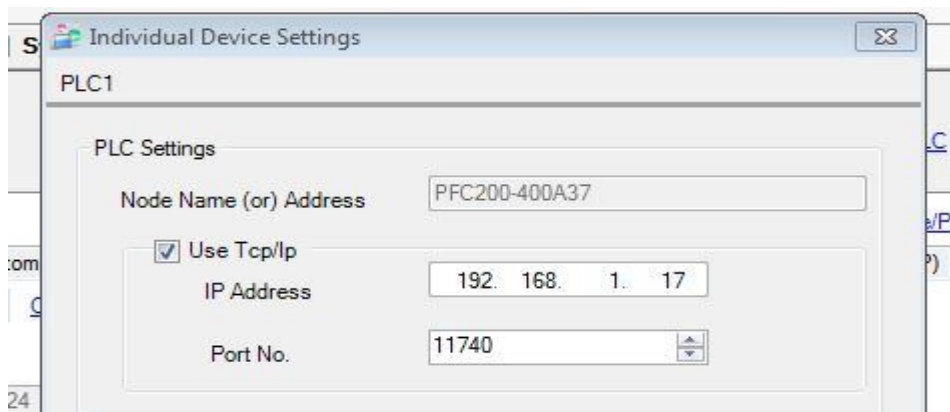
Click **Import** and select the eCockpit project's XML file:



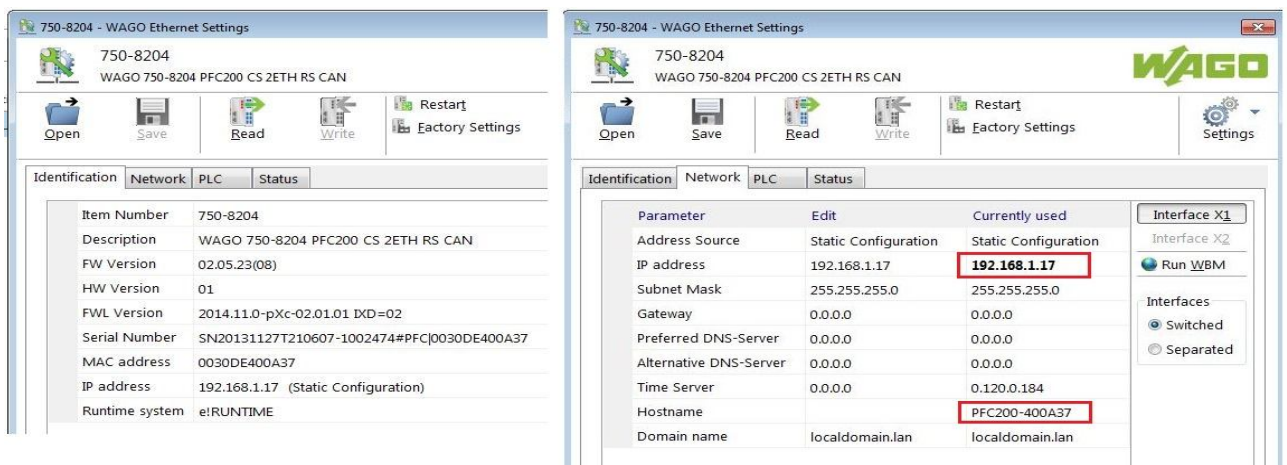
The tags should be imported like this:



For **communication** settings use either IP address or node name (/address):



The PFCs data could be checked with the WAGO Ethernet settings tool (or the WBM):



The PFC's port might be **protected by "Authentication"** – this setting has to be disabled via the "WAGO Web-based Management" tool. Go online to the PFC by entering its IP address in your Browser. To get access a user and password might be required (default is "admin" and "wago"). Select "Ports and Services", then "PLC Runtime Services" and uncheck "Port Authentication enabled". Change by pressing submit. For CoDeSys V2 do the same procedure.

WAGO Web-based Management
 WAGO 750-8204 PFC200 CS 2 ETH RS CAN Username: admin Logout

Navigation

- Information
- PLC Runtime
- Networking
- Firewall
- Clock
- Administration
- Package Server
- Mass Storage
- Software Uploads
- Ports and Services
 - Network Services
 - NTP Client
 - PLC Runtime Services
 - SSH
 - TFTP
 - DHCP
 - DNS
 - MODBUS

Configuration of PLC Runtime Services
 Changes will take effect immediately.

General Configuration

Port Authentication Password:
 Confirm Password: Submit

CODESYS 2

CODESYS 2 State: ✗ disabled

Webserver enabled: ☐ Submit

Communication enabled: ☒ Submit

Communication Port Number: Submit

Port Authentication enabled: ☒ Submit

e!RUNTIME

e!RUNTIME State: ✓ enabled

Webserver enabled: ☐ Submit

Port Authentication enabled: ☐ Submit

Status

WBM ☐

Local Time 17:02
 Local Date 17.11.2016

PLC Switch RUN

LEDs

U6	<input type="checkbox"/>	SYS
U5	<input type="checkbox"/>	RUN
U4	<input type="checkbox"/>	IO
U3	<input type="checkbox"/>	MS
U2	<input type="checkbox"/>	NS
U1	<input type="checkbox"/>	CAN

The Host-(Node)Name can be changed in the submenu "Networking – Host-/Domaine Name". The default will be "PFC"+"model type (100 or 200)"-"last 6 digits of the MAC address":

WAGO Web-based Management
 WAGO 750-8204 PFC200 CS 2 ETH RS CAN Username: admin Logout

Navigation

- Information
- PLC Runtime
- Networking
 - Host-/Domain Name
 - TCP/IP
 - Ethernet
- Firewall
- Clock
- Administration
- Package Server

Configuration of Host- and Domainname
 Changing hostname will take effect after the next controller reboot.

Hostname

Currently used: PFC200-400A37
 Configured: Submit

Changing domain name will take effect immediately.

Domain Name

Currently used: localdomain.lan
 Configured: Submit

Status

WBM ☐

Local Time 16:56
 Local Date 17.11.2016

PLC Switch RUN

LEDs

U6	<input type="checkbox"/>	SYS
U5	<input type="checkbox"/>	RUN
U4	<input type="checkbox"/>	IO
U3	<input type="checkbox"/>	MS
U2	<input type="checkbox"/>	NS
U1	<input type="checkbox"/>	CAN