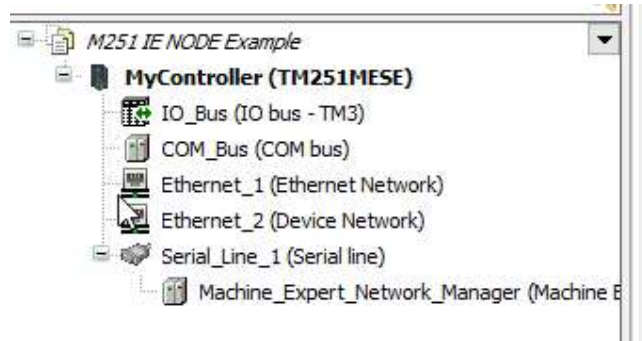


M340 to IE-NODE

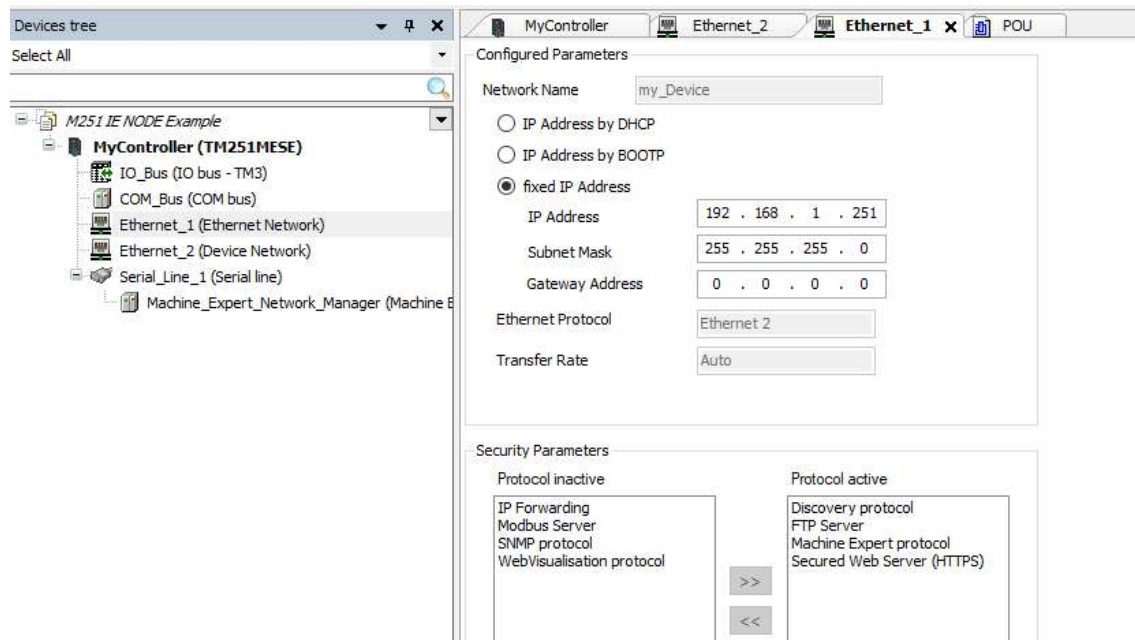
The following was done using an TM251MESE V5.1.9.44 and Machine expert V2.0.3.

PLC architecture



Hardware setup

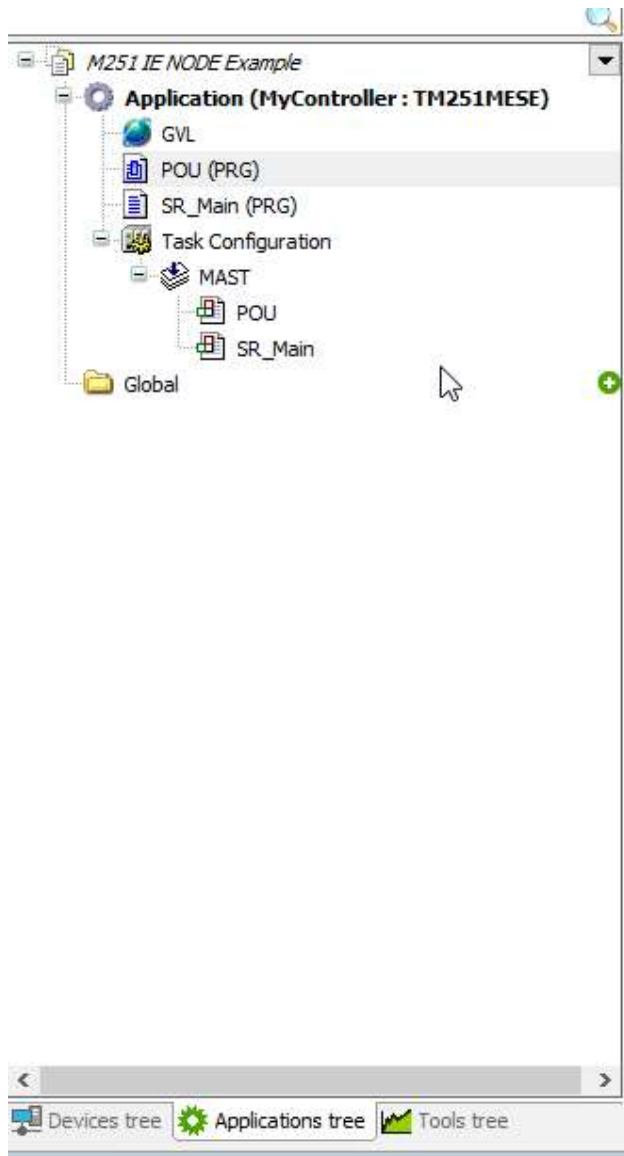
Double click on the Ethernet_1 network in the device tree:



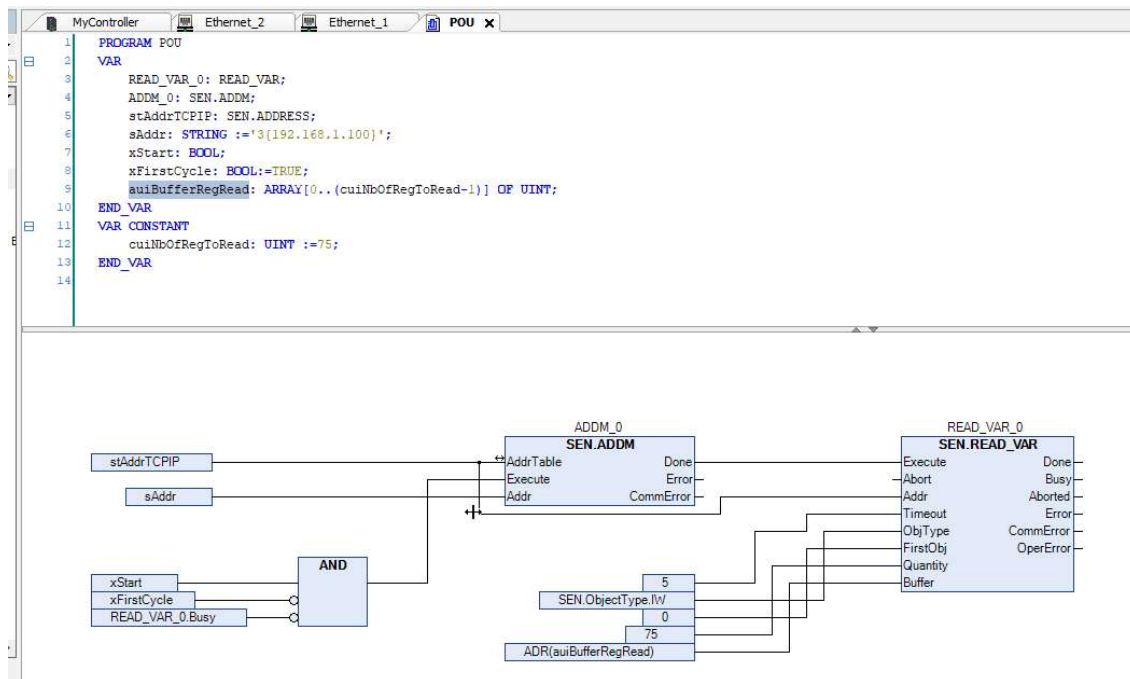
The port has been setup as 192.168.1.251 and a subnet of 255.255.255.0. The subnet must match between the PLC and the IE NODE.

Program:

There is 1 program section that has been added in the application tree called SR_Main



This program has all the variables declared locally, and the program in a CFC section. See the code below:



So, the variable declaration at the top shows the setup of the function blocks and some of the data needed to perform the read of the IE NODE by the PLC.

The **stAddrTCPIP** variable is set to 3{192.168.1.100} so the communication will be out of the Ethernet 1 port of the PLC that we setup earlier. There is an **xStart** that when you trigger to a “1” or “TRUE” level it will start the communication. It is disabled if the PLC is in its first scan – or if the **READ_VAR** block is busy.

The **xStart** then triggers the **ADDM** block which will convert the address string into a format that the **READ_VAR** understands. After that has been executed it triggers the **READ_VAR** block. This initiates a read of Input registers (%IW on the object type which tells the block to read 3x registers). The first object is 0, and the quantity is 75 registers. This means it will read address 192.168.1.100 from register 0 to register 74 out of the port Ethernet 1. The buffer pin is where this information is put into following a successful read. You should see in the local declaration table above that this is set to be an array of 75 UINT’s to have space for all the data that is read.

The communication will continue until the **xstart** input is set to “0” or “FALSE”.

So, in summary the project does what it says on the tin and feel free to use.