

How to read device register through Modbus serial port PLC M340

What is the purpose

To understand how to use Modbus serial port PLC M340 to communicate with other Modbus device

What units are effected

1. PLC M340

Details

This application is divided into several parts

Section	Title
1	Parts List
2	Topology Overview
3	Step by step link setup
4	Offline testing
5	Remarks

Section 1; Parts list

Parts List table

Items used in the test

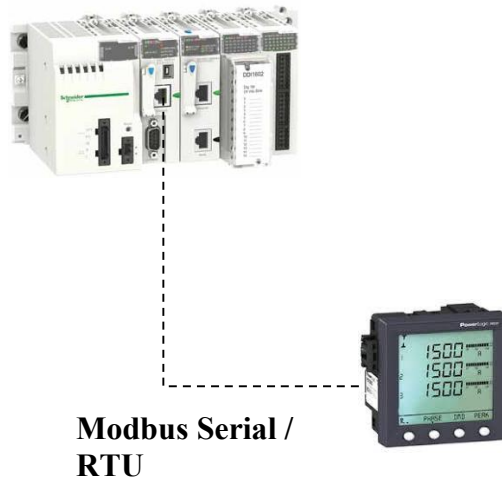
Items	Part numbers	Description
PLC M340	• BMXP341000	PLC M340 with Modbus port c/w power supply and backplane
Unity Pro Software	• UNYSPUSFUV1X	Software for unity PLC (M340,M580,Premium, Quantum)

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Section 2; Topology overview

Topology overview
diagram

Physical Topology Connection

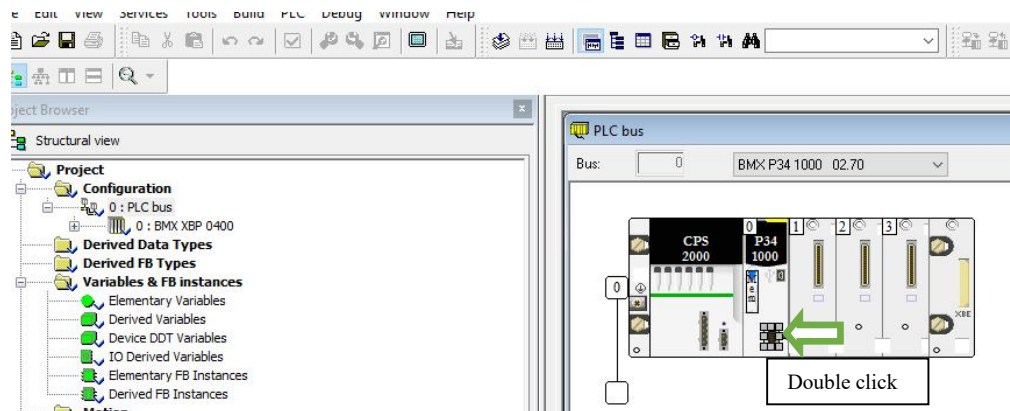


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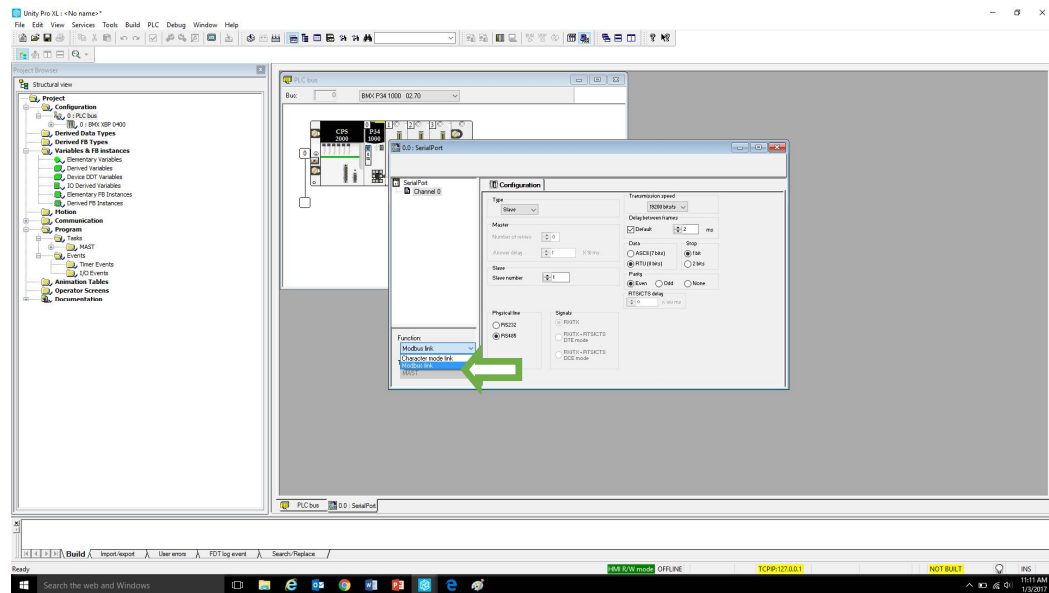
Section 1; Parts liststep by step configuration on Unity Pro

Unity Program

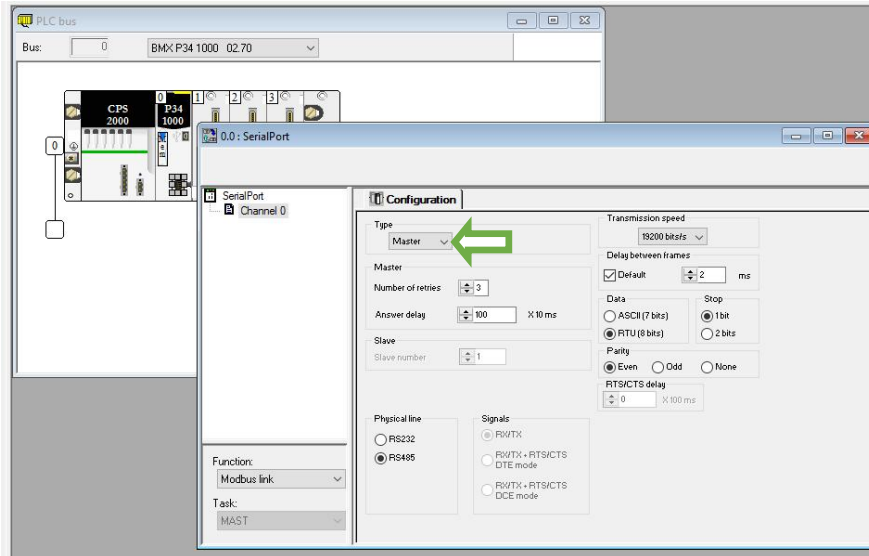
1. Open the unity pro application
2. Configure the hardware (CPU, backplane and power supply)
3. Configure serial port on cpu, by double click on Modbus port picture



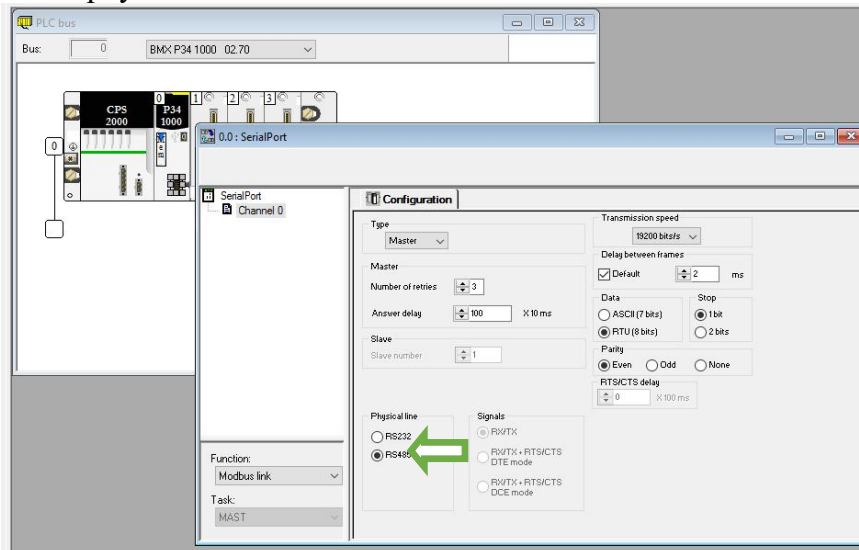
4. Select function as Modbus Link



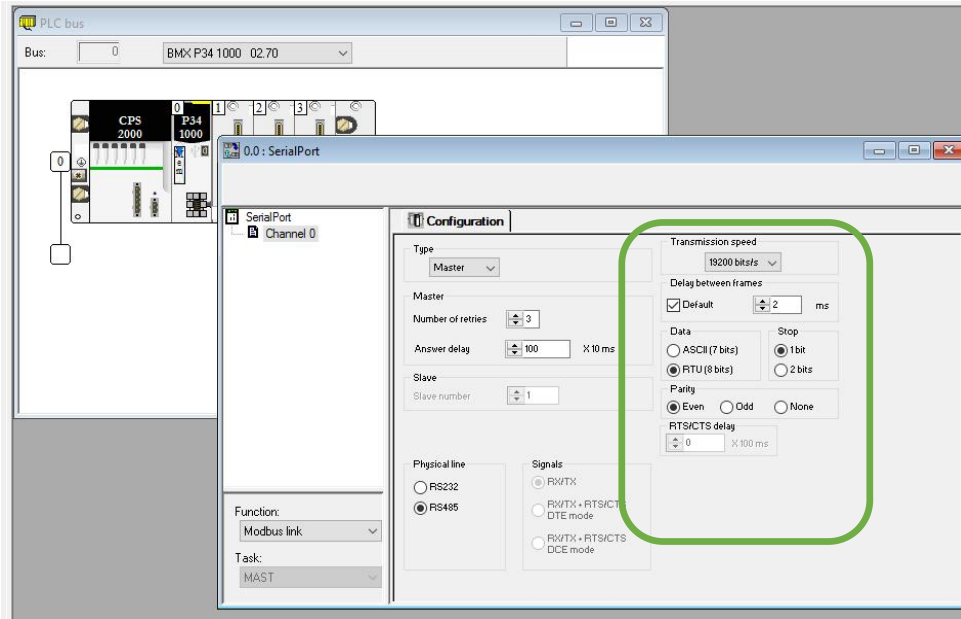
5. Select type as Master



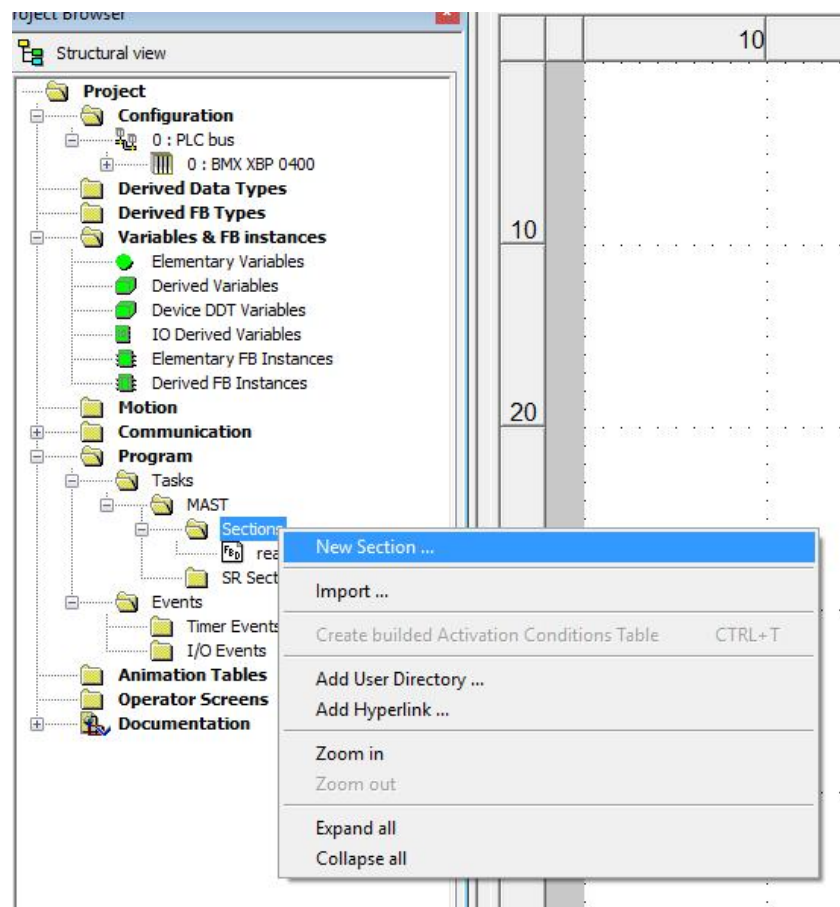
6. Select physical line to RS-485



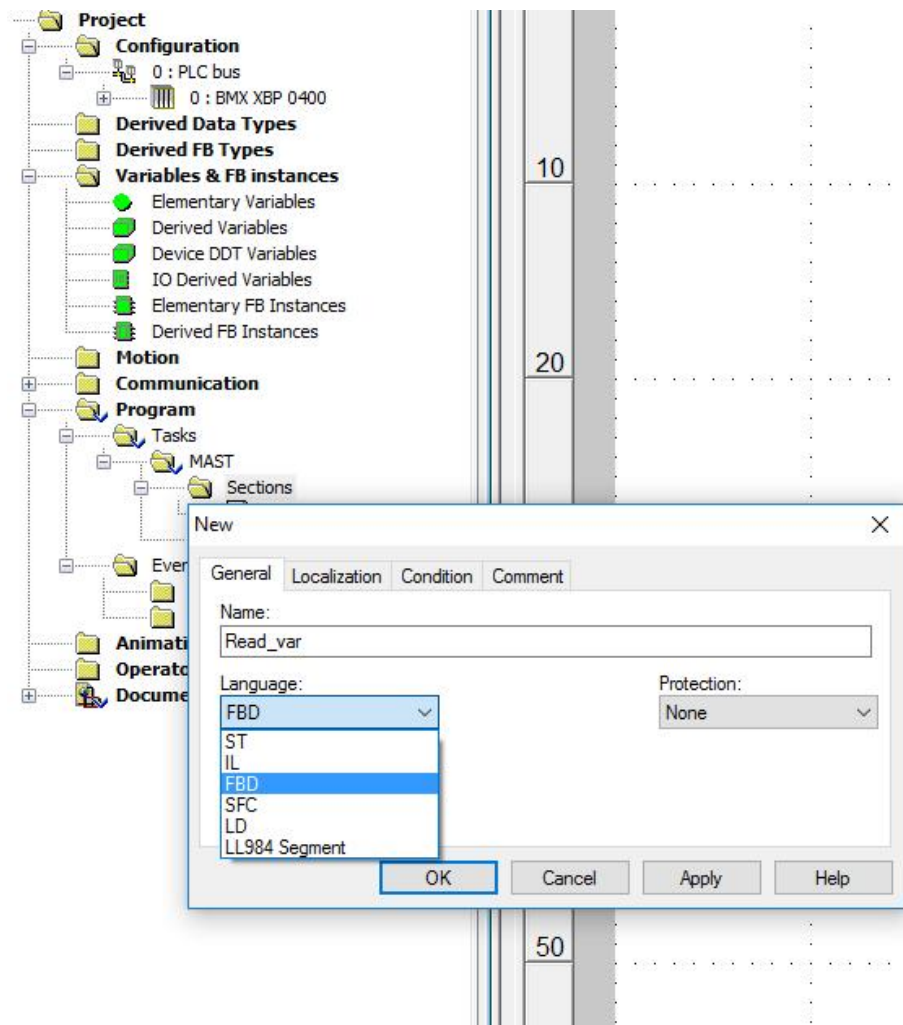
7. Configure communication parameter exactly similar with device communication parameter



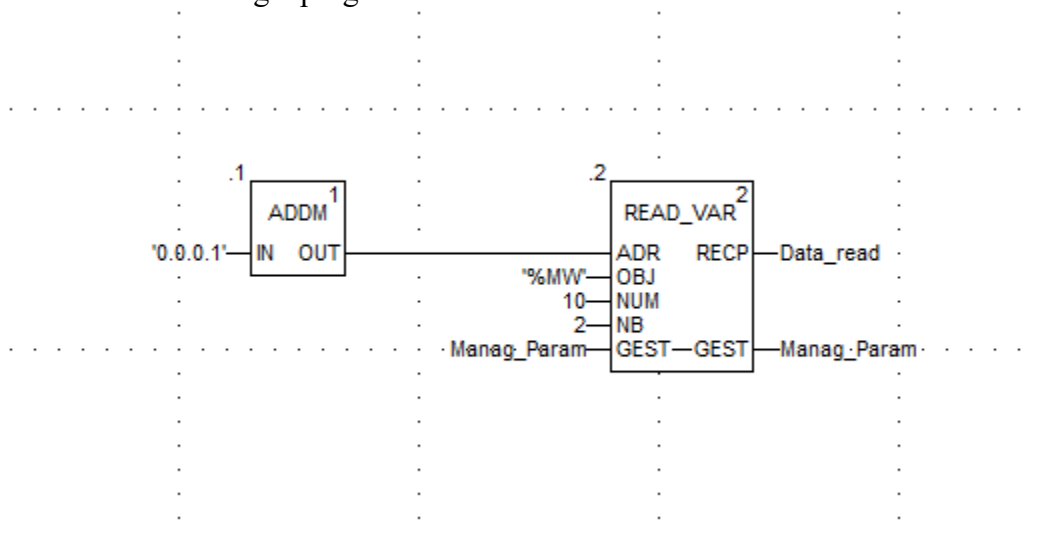
8. Create Unity Pro logic program
 - a. Create New Section



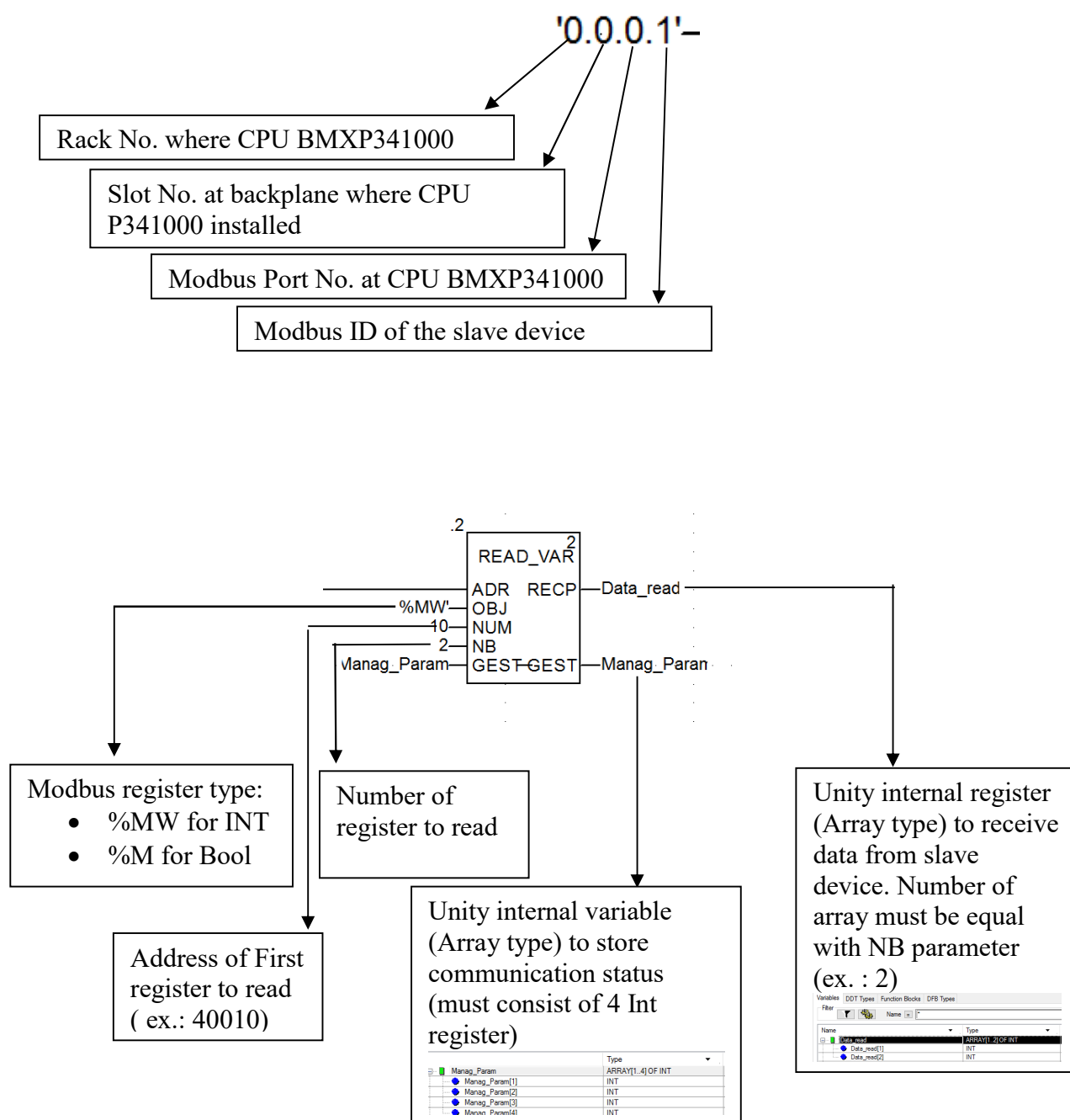
- b. Select programming language, and name the program section (ex.: FBD)



- c. Create the logic program as below



Function block explanation :



Section 4; Online Testing

Online testing :

1. Compile the project
 2. Connect Unity Pro to the PLC via USB cable
 3. Download the project to PLC and RUN
 4. Connect RS485 kabel from Modbus port PLC to modbus port slave device
 5. Test your project
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Section 5; Remark

Modbus serial port is a common feature that Schneider PLC has, and it can be connected to various device that support modbus protocol up to 31 slave device per Modbus port.
