

SoMachine Basic Communication with SCADA

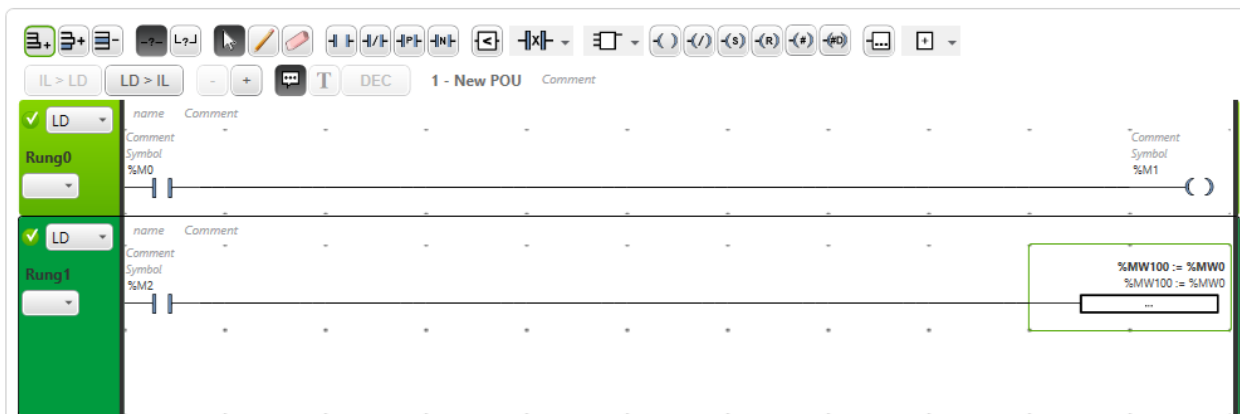
- If you want to communicate your PLC logic with SCADA, Follow further procedure and do as well.
- Follow below procedure,

Introduction :

- Write PLC Logic first in SoMachine Basic.
- Here I have created a simple program to help you better understand this.
- Also I have given information of the require configuration in SCADA as well as PLC.
- Follow further procedure for the communication.

Step 1 :

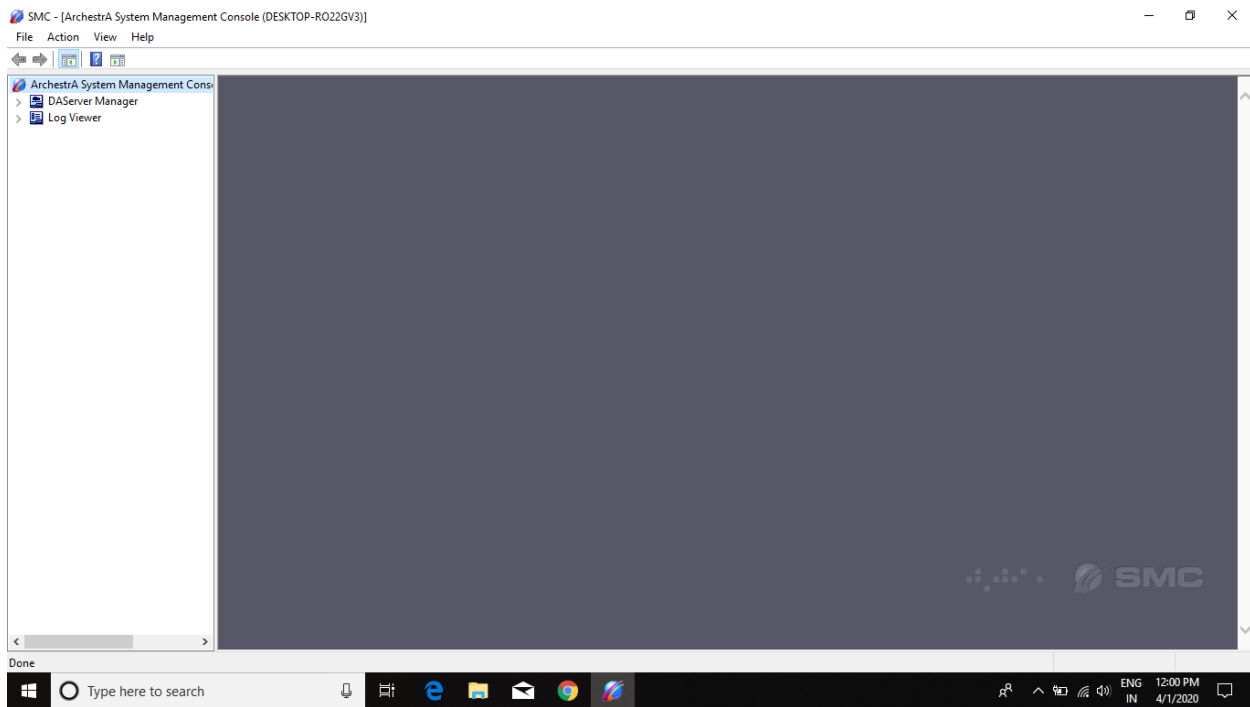
- **Create PLC Program as you have require in the SoMachine Basic.**



SoMachine Basic Sample PLC Program

- Here, I have configure five parameters in the sample PLC program.
- **%M0, %M1, %M2, %MW0 and %MW100**
- I will show you, how will be communicate on which particular address.
- Follow **Step 2** procedure.

Step 2 :

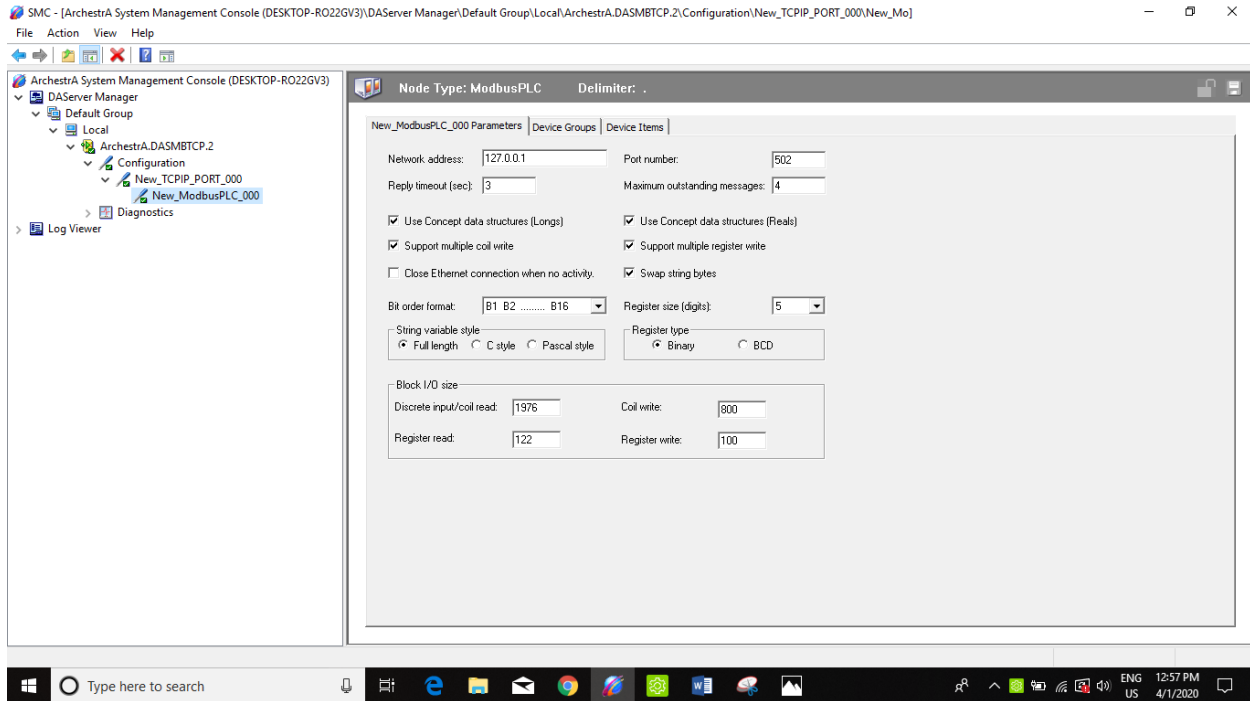


DASMBTCP Configuration in SCADA PC

- **Configure DASMBTCP in user PC or which you have used for visualize SCADA.**
- Before configuration of the DASMBTCP you need to install DASMBTCP Driver on that PC.
- After Completion of the DASMBTCP driver, follow below procedure.
- Open System Management Console.

Step 3 :

- Type your controller IP Address and save settings.
- Example: 127.0.0.1
- Create Topic and save configuration.
- **Configuration in System Management console.**



ModbusTCP Configuration in System Management Console

- Start Simulator in SoMachine Basic.
- Here, I have moved different values in **%MW0 Address**.
- Now, I have checked data in Wwclient.
- **Check this values in wwclient.**
- **Connect Wwclient and checked data.**

[Icons: Send, Rollback, Download non-program data, Backup, IL > LD, LD > IL, -, +, T, DEC, 1 - New POU, Comment]

Rung 0
 name: LD, Comment: -
 Symbol: %M0
 Value: False

Rung 1
 name: LD, Comment: -
 Symbol: %M2
 Value: True

%MW100 := %MW0
 %MW100 := %MW0
 ...
 50 := 50

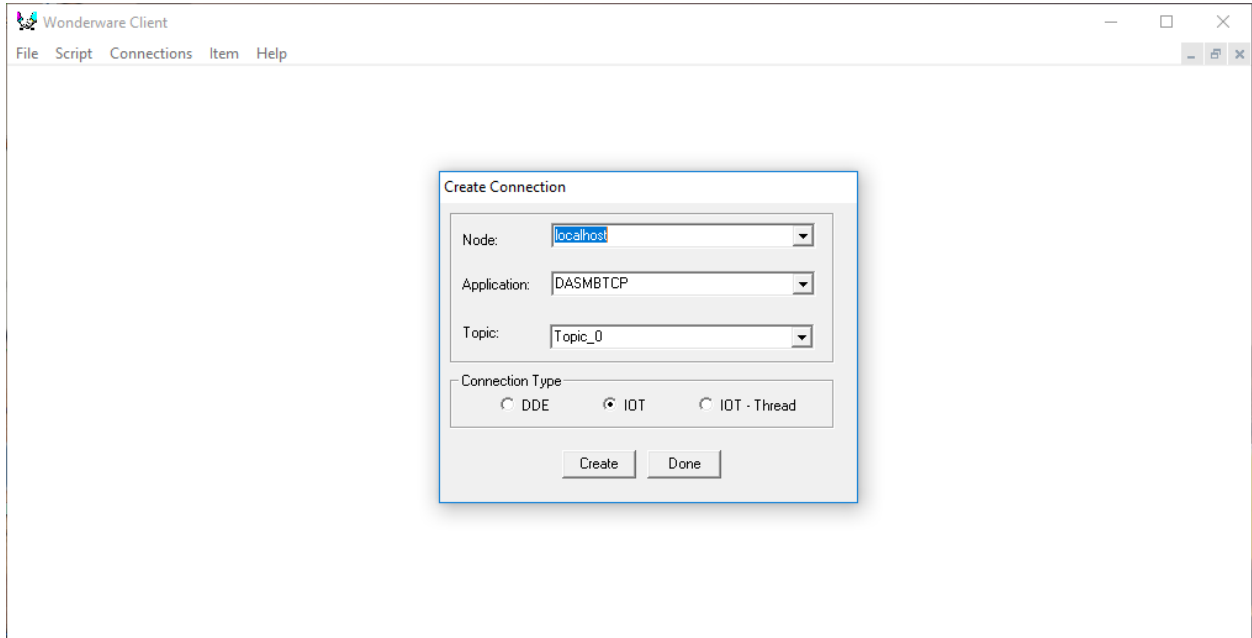
Animation table_0
 %MW0 [Add] [Insert] Time Base: 5 s [Open Trace window]

Used	Trace	Address	Symbol	Value	Force	Comment
<input checked="" type="checkbox"/>	<input type="checkbox"/>	%MW0		50		

SoMachine basic Simulation Mode

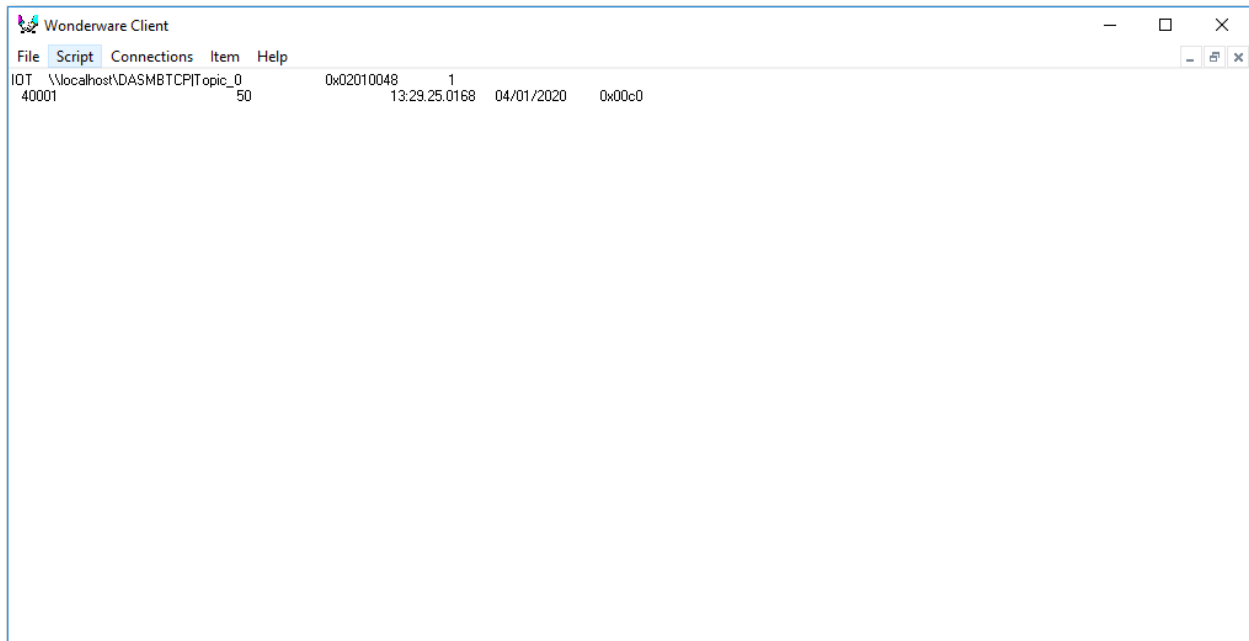
Step 4 :

- **Wwclient Configuration.**



Wwclient Configuration

- Create Connection in Wwclient.
- Node address, Application and Topic and done the changes.
- Check data.
- See below attached image, while I have passed 50 values in %MWO address, then Wwclient have capture data on 40051 address.
- Change values in particular address and check on Wwclient.
- Check your data as per configuration of the System Management console.



Wwclient Data Capturing

- Here, you can show 50 values in 40001 address.
- As per PLC program, while I have passed 50 values in %MW0 then Wwclient capturing data on 40001 address.
- As per this you can easily check PLC data in the wwclient.
- SCADA communicate on based of Modbus addresses.