

# Scene 2 Factory IO

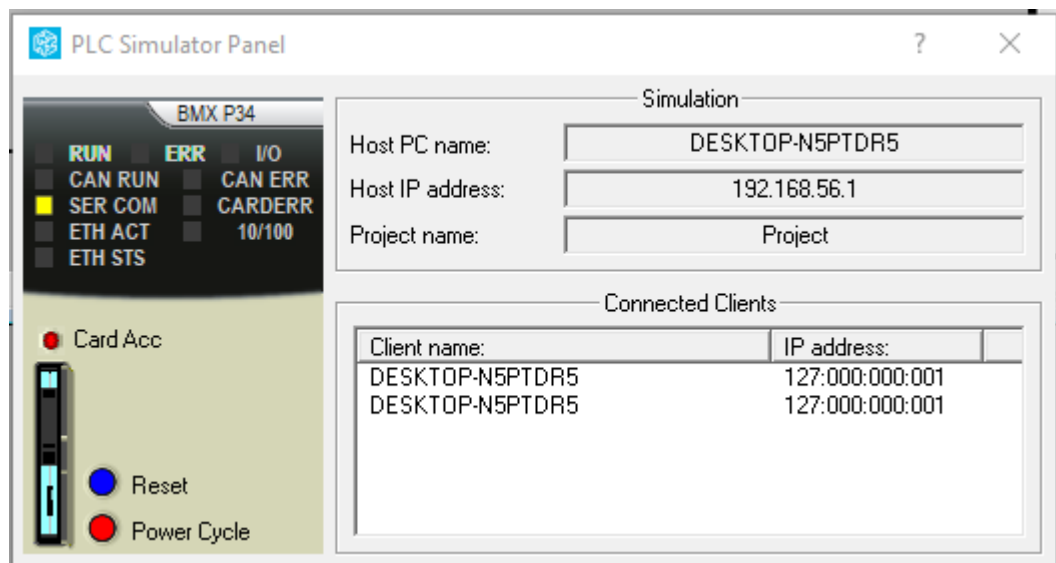
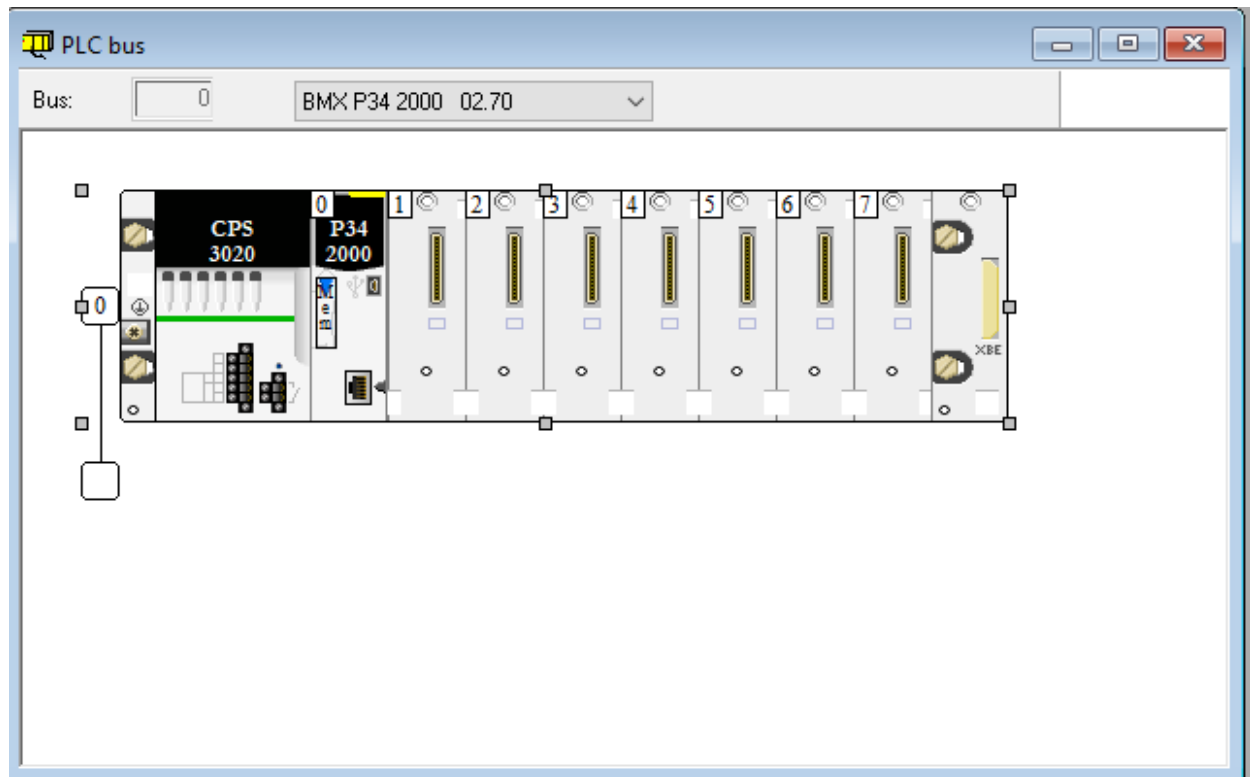
Objective: Transport the box from Sensor A to Sensor B.

Solution : A Reset Set(RS) function block is used to accomplish the task. Start button starts the entry conveyor which also energizes the RS block. A NC block is used as the retroreflective sensors are always ON . The stop button stop the entry conveyor.

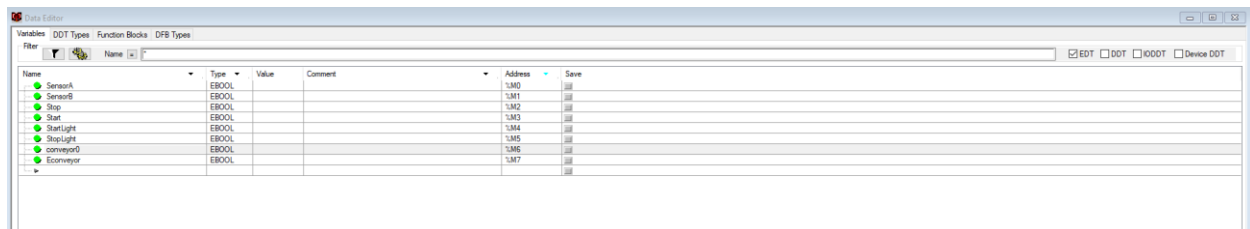
Software Used : Factory IO and Unity Pro XL

Communication Protocol : Modbus Protocol is used.

# 1. Hardware Configuration and PLC simulator Panel ( 2 connected Clients, factory io and unity pro xl )



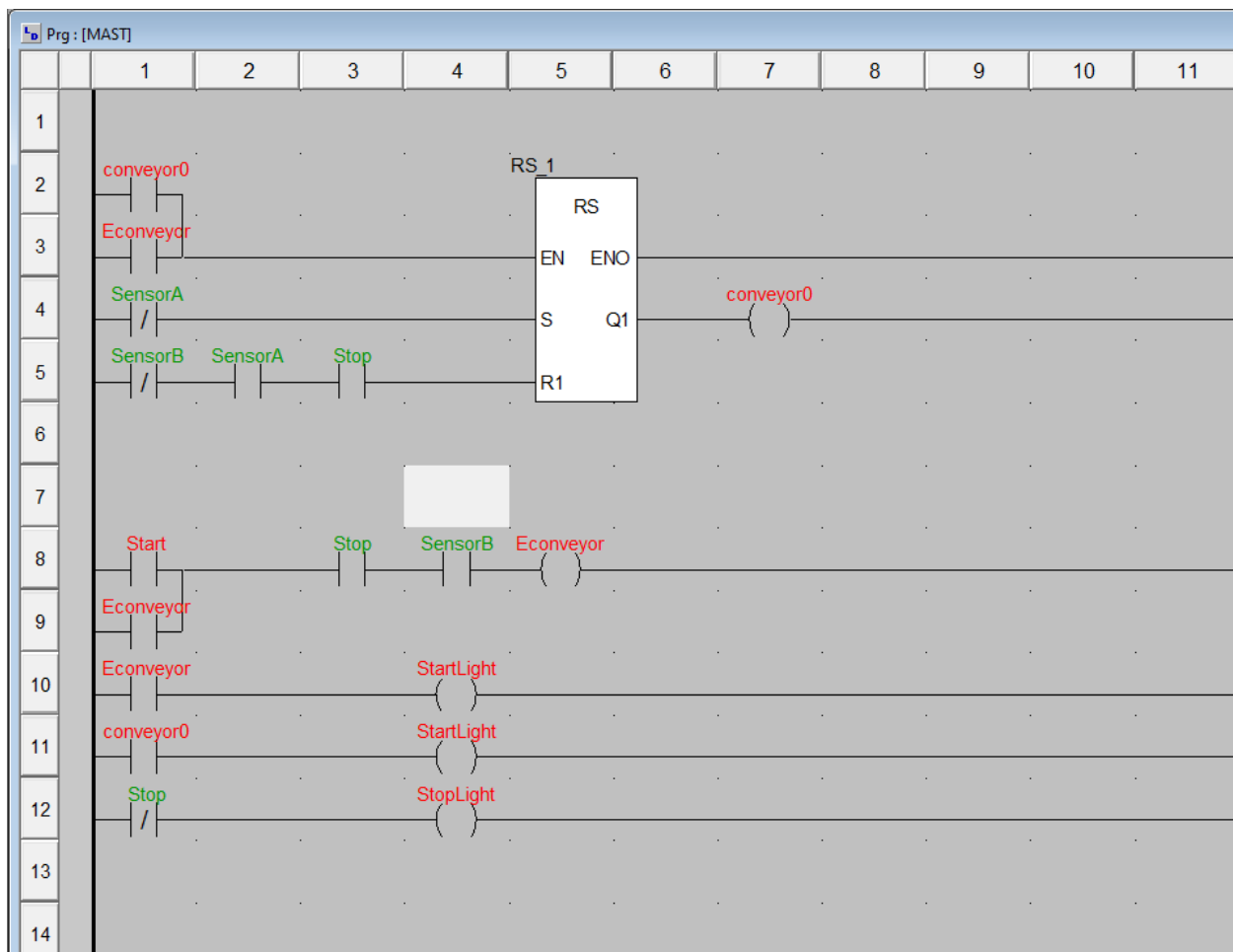
## 2.Data variable :



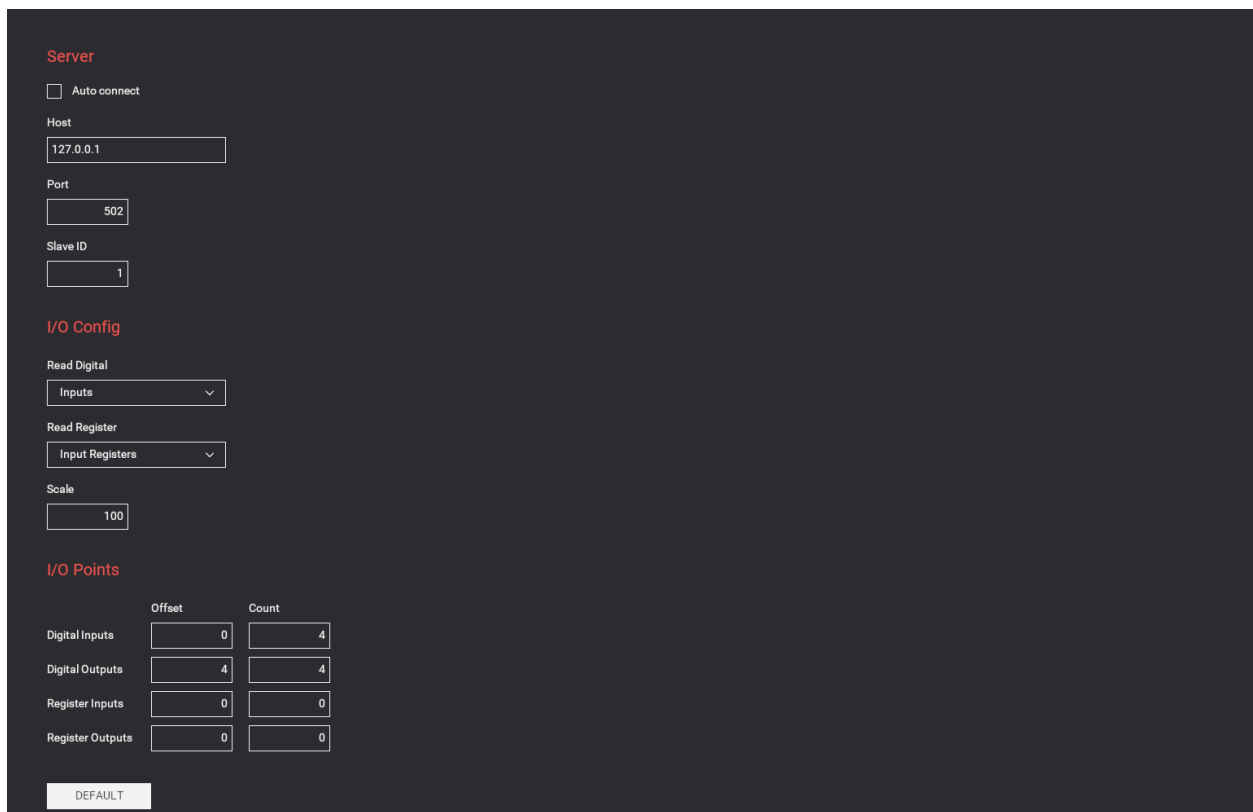
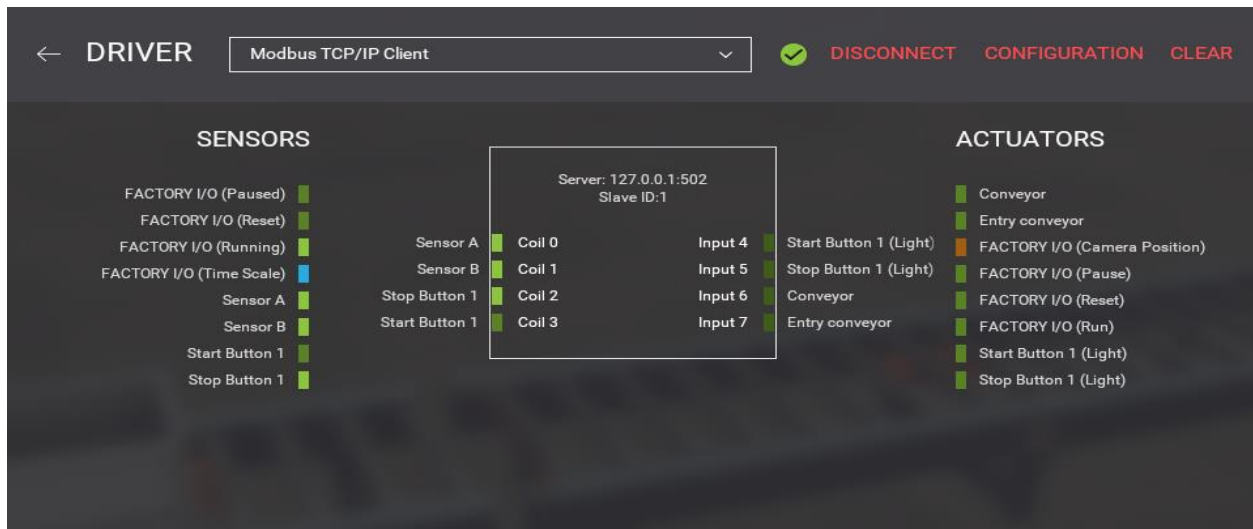
The screenshot shows the 'Data Editor' window with a table of variables. The table has columns for Name, Type, Value, Comment, Address, and Save. The variables listed are SensorA, SensorB, Stop, Start, StartLight, StopLight, conveyor0, and Econveyor, all of type EBOOL. Their addresses range from 1M0 to 1M7.

Name	Type	Value	Comment	Address	Save
SensorA	EBOOL			1M0	
SensorB	EBOOL			1M1	
Stop	EBOOL			1M2	
Start	EBOOL			1M3	
StartLight	EBOOL			1M4	
StopLight	EBOOL			1M5	
conveyor0	EBOOL			1M6	
Econveyor	EBOOL			1M7	

## 3.Main PLC program (ladder diagram) :



#### 4. Factory IO Client Server settings :



6.Factory IO: Docked Sensor and actuators tags when the system is running.



1 Default Sensor Value