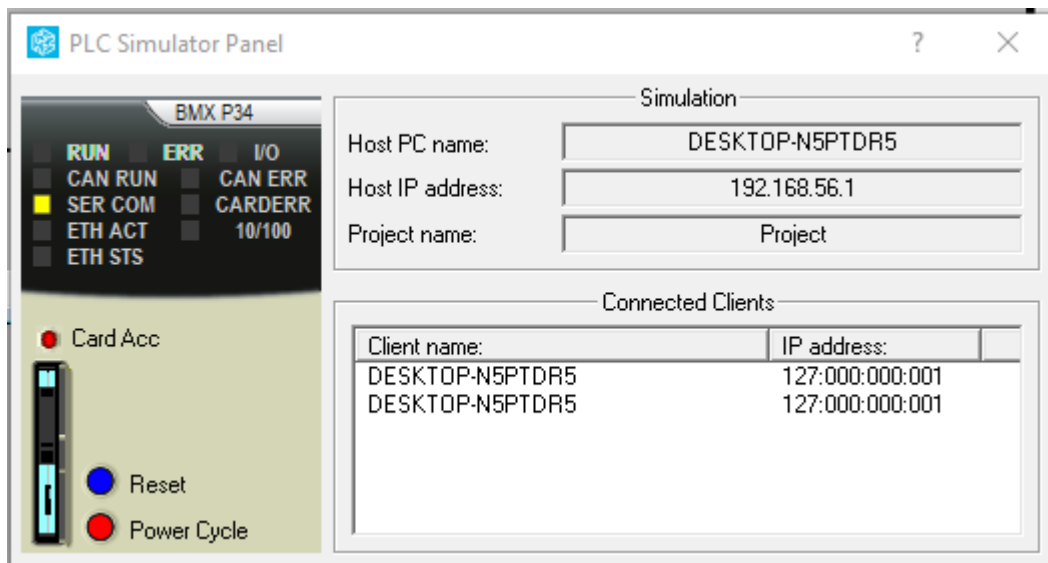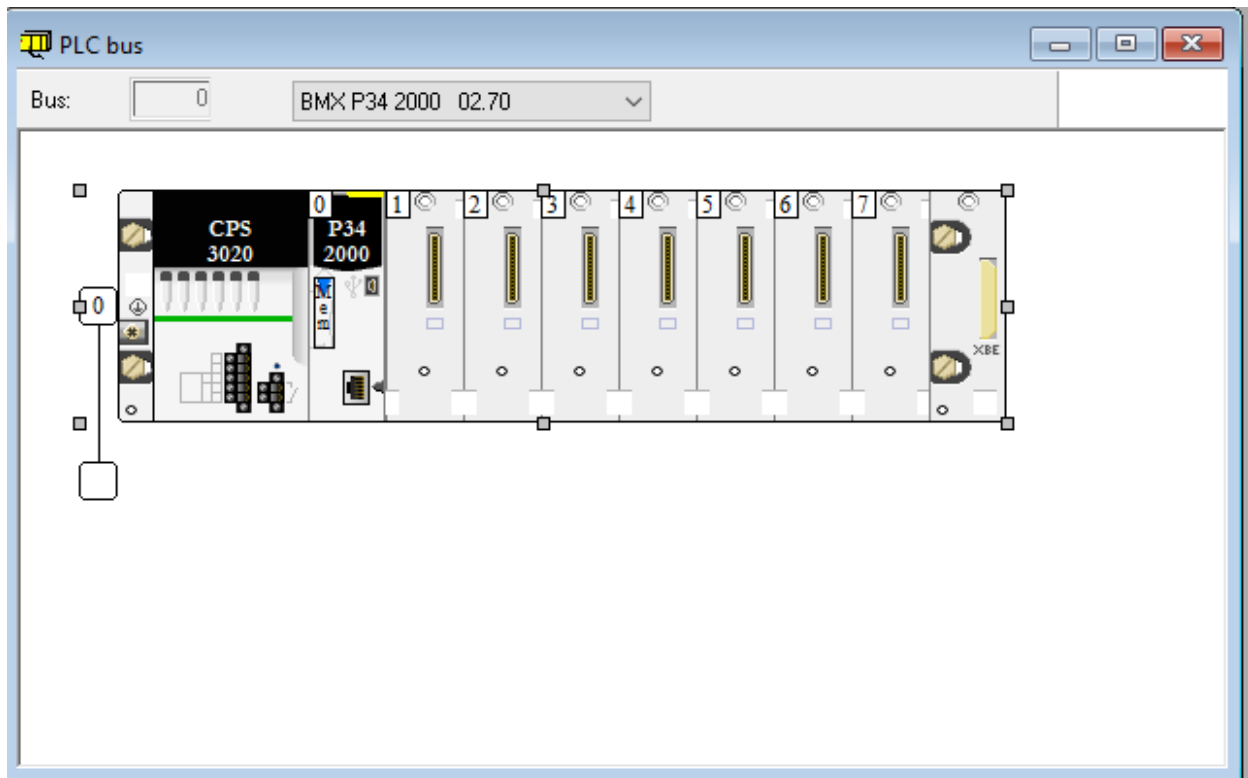# Scene 3 Factory IO

Objective: Fill and empty tanks using timers.   .

Solution : Timer Off is used to control the discharge and filling valve . DIVTIME is used to make values readable for output display . R_TRIG is used to control the timers using Fill and Discharge valve push buttons as Inputs .

Software Used : Factory IO and Unity Pro XL

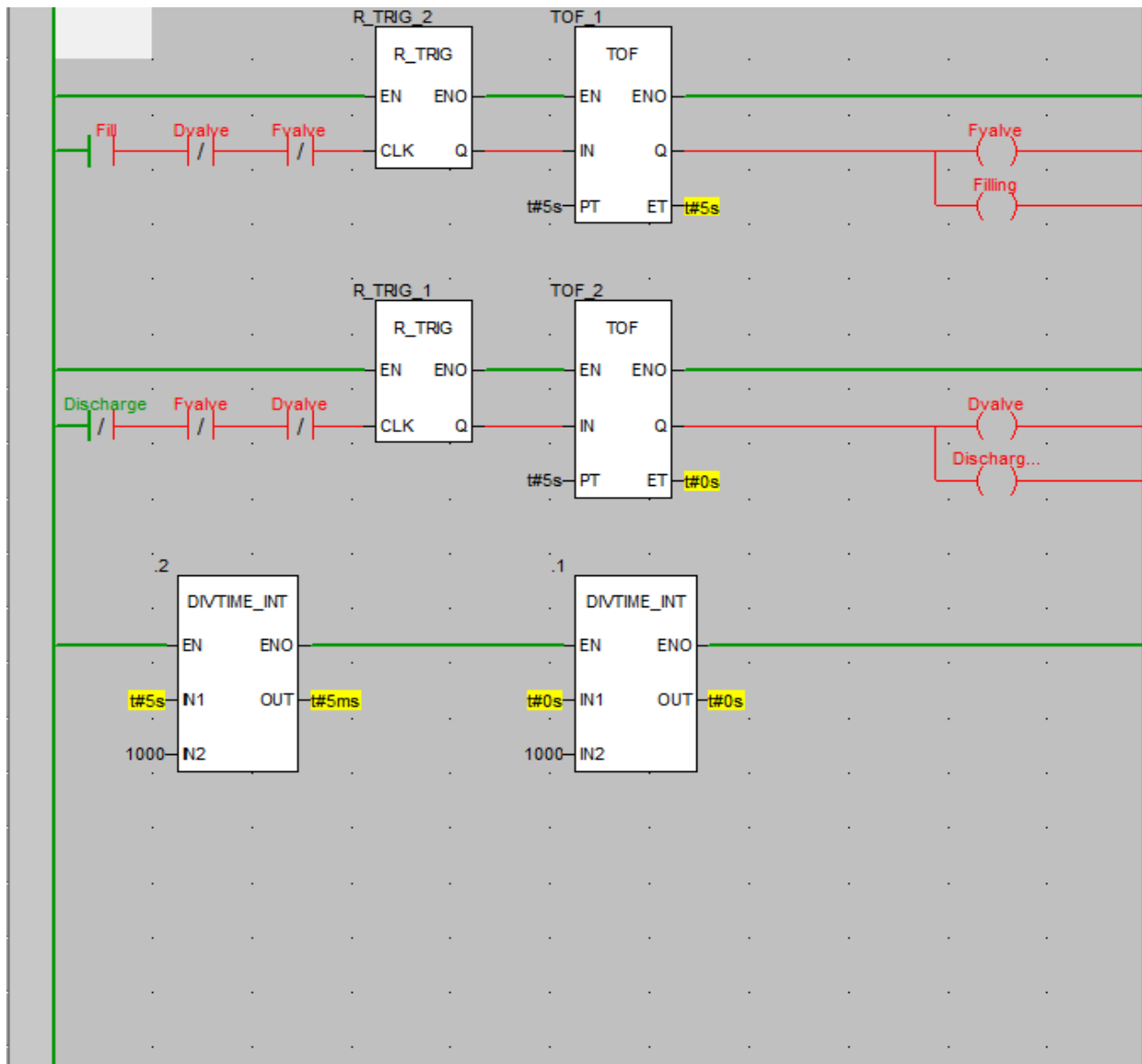Communication Protocol : Modbus Protocol is used.

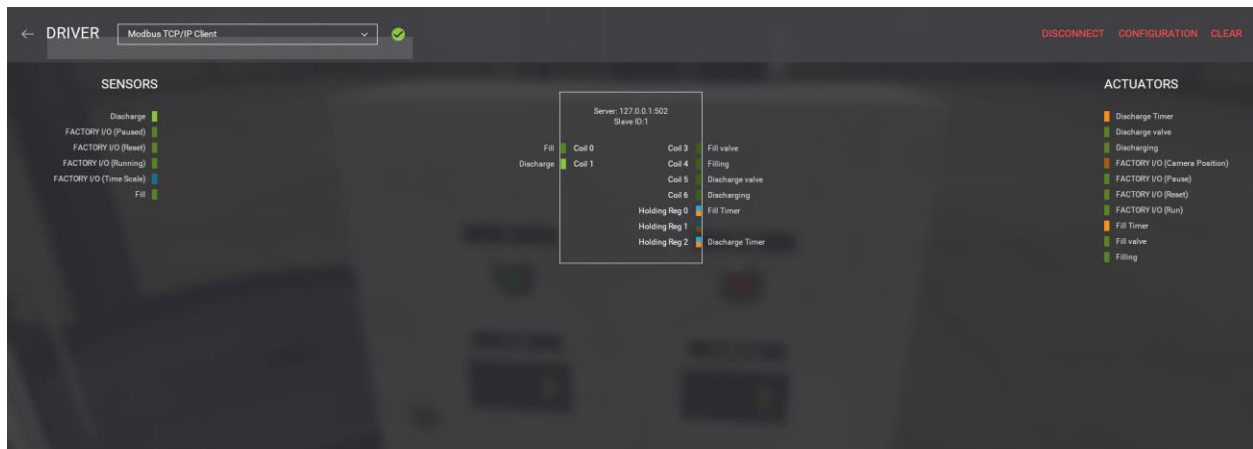# 1.Hardware Configuration and PLC simulator Panel (2 connected Clients, factory io and unity pro xl)

2.Data variable :

Name	Type	Value	Comment	Address	Save
Fill	EBOOL			%M0	☐
Discharge	EBOOL			%M1	☐
Fvalve	EBOOL			%M3	☐
Filling	EBOOL			%M4	☐
Dvalve	EBOOL			%M5	☐
Discharging	EBOOL			%M6	☐
FTimer	TIME			%MW0	☐
DTimer	TIME			%MW2	☐
▶					☐

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.