

Scene 4 Factory IO

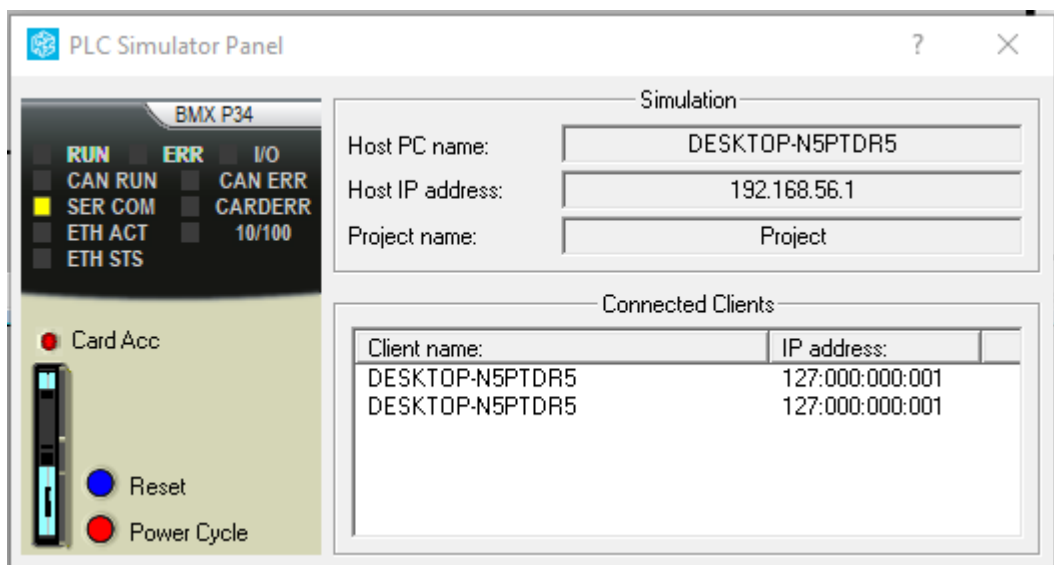
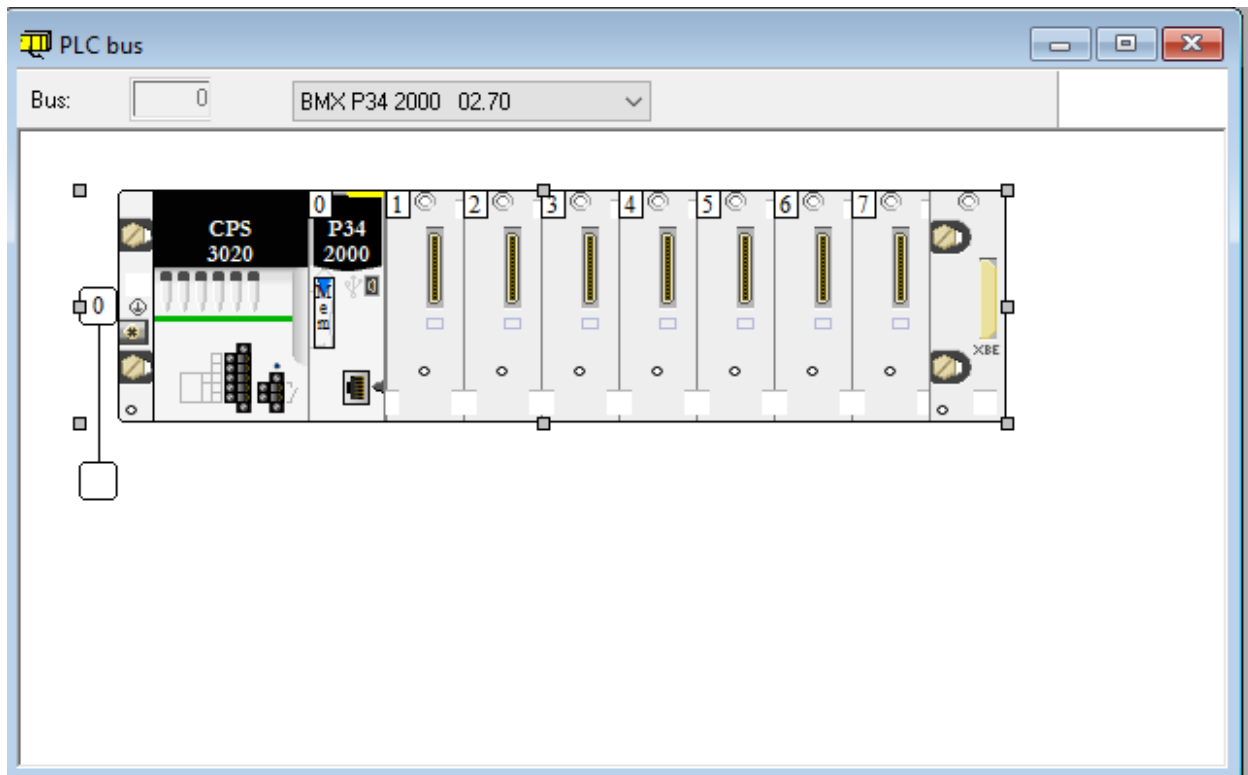
Objective: Load and Unload boxes into a conveyor, when emergency stop is pressed , it disables the system , start and stop button .

Solution : Count UP is used to count the boxes . Timer Off is used to control the Remover. F trig is used to read the Exit sensor. A counter is used to check if the quota is reached and stop the system .













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
AtExit	EBOOL			%M1	
Bconveyor	EBOOL			%M7	
Counter	INT	0		%MW0	
Econveyor	EBOOL			%M6	
EmergencyButton	EBOOL			%M5	
Emitter	EBOOL			%M8	
ItemReady	EBOOL			%M2	
Remover	EBOOL			%M9	
SButtonLight	EBOOL			%M11	
StartButton	EBOOL			%M4	
StopButton	EBOOL			%M3	
					

3.Main PLC program (ladder diagram) :

