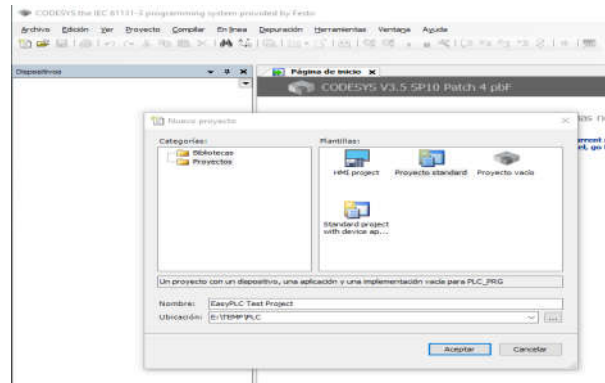


## CODESYS v3.5 OPC Driver for EasyPLC

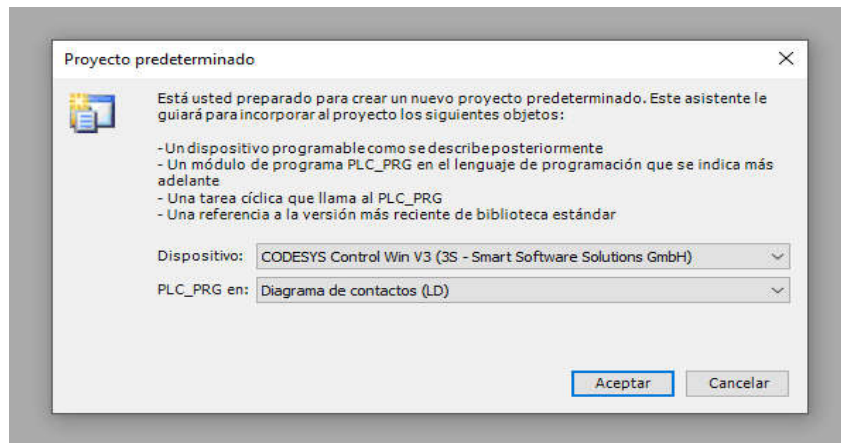


Here are explained the operations to communicate Codesys v.3.5 with EasyPLC.

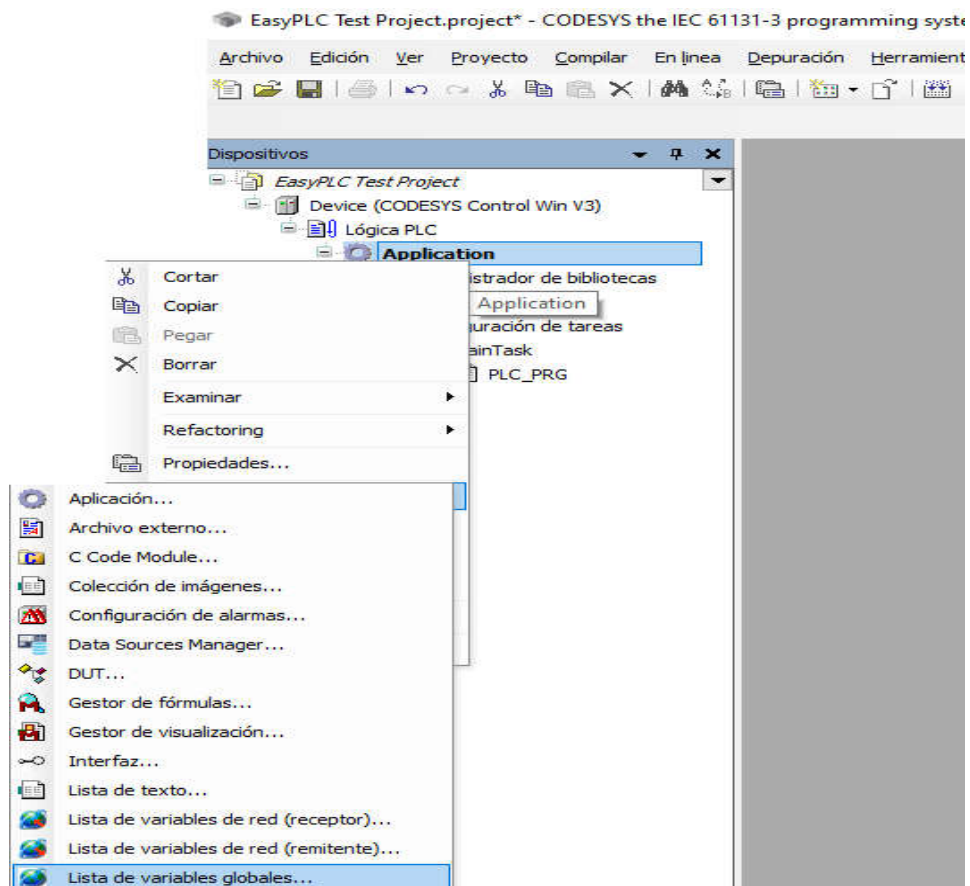
### 1. Open Codesys, and ceate a new Project



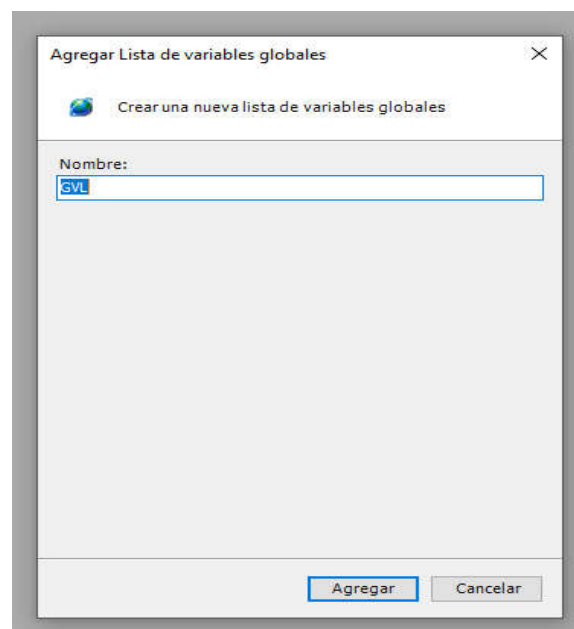
### 2. Click Accept



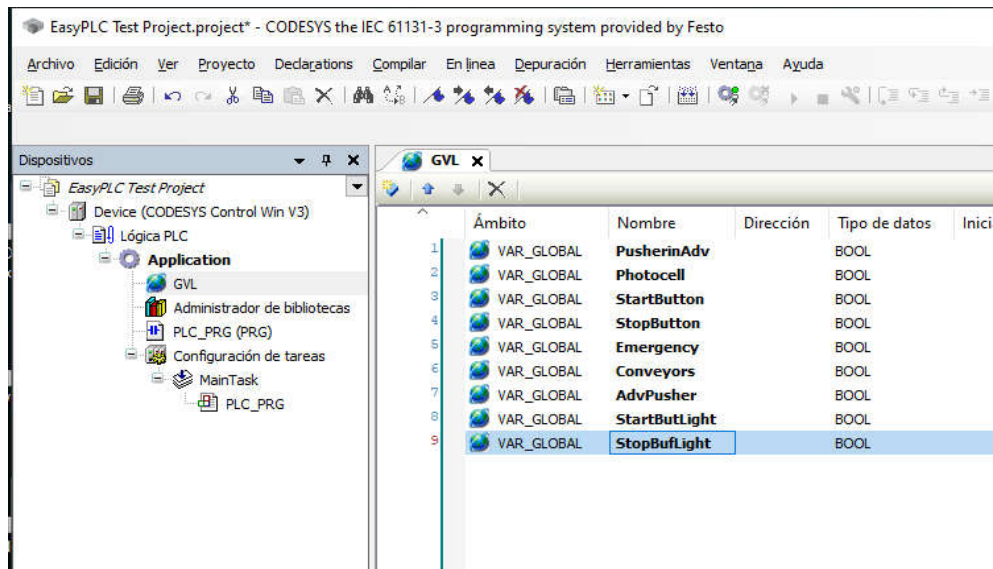
### 3. Mouse right button click over Application, form menu select Add Object -> Global Variable List



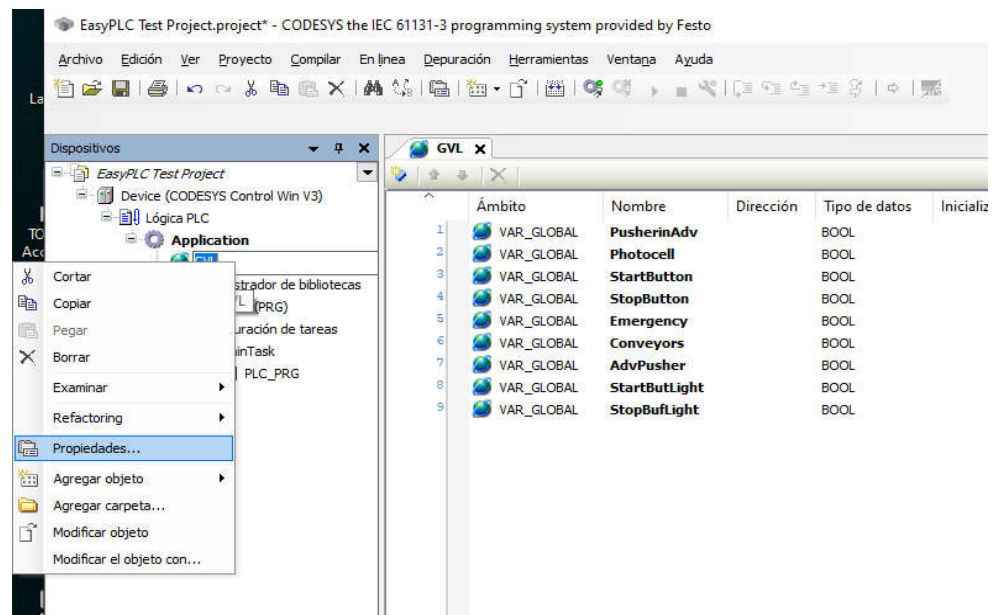
#### 4. Click Add



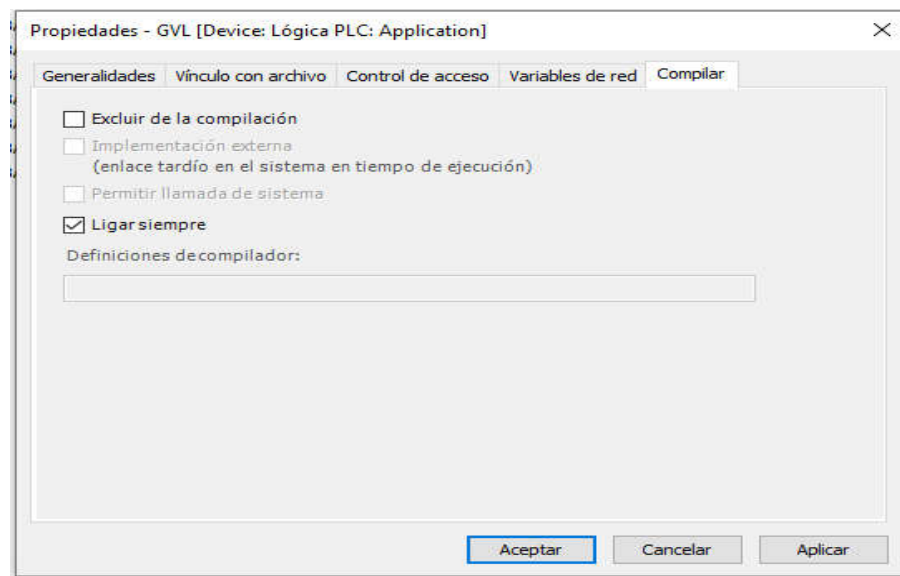
5. Select Tab mode (from right side icon), then add the following variables



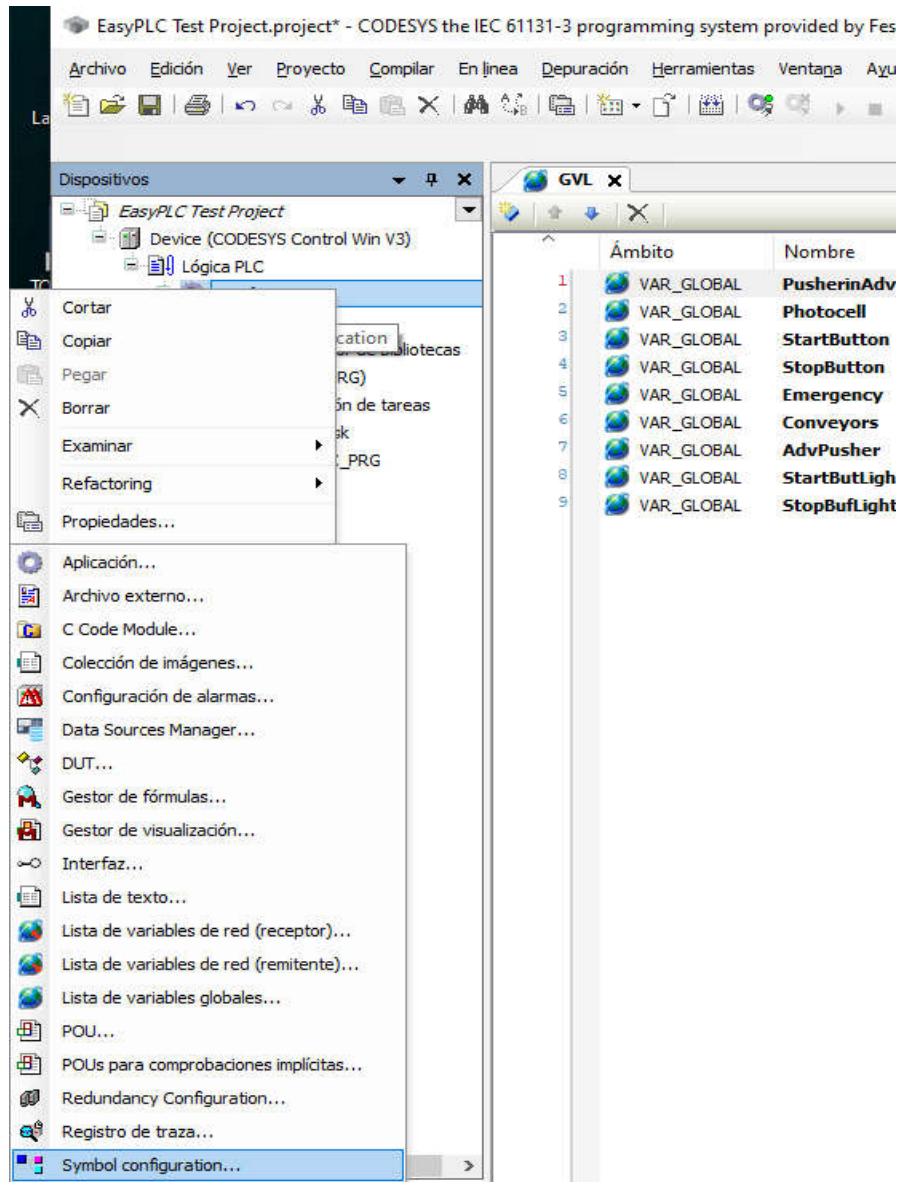
6. Click with mouse right button in GVL mode, then select Properties



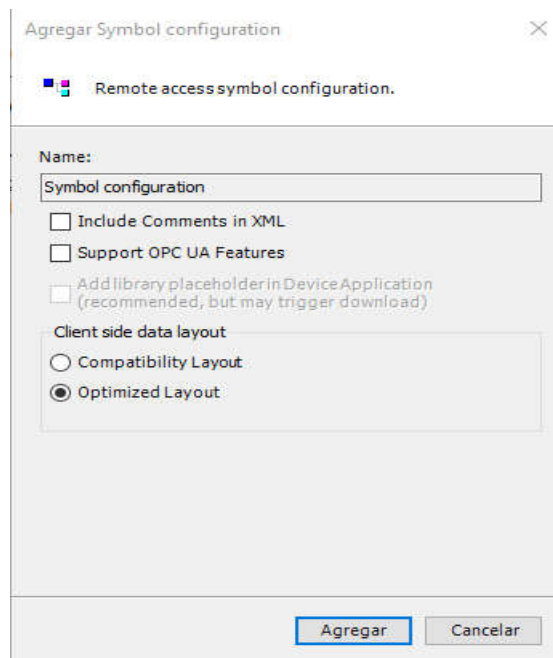
7. Select Compile tab, and check Join Always, then click Accept



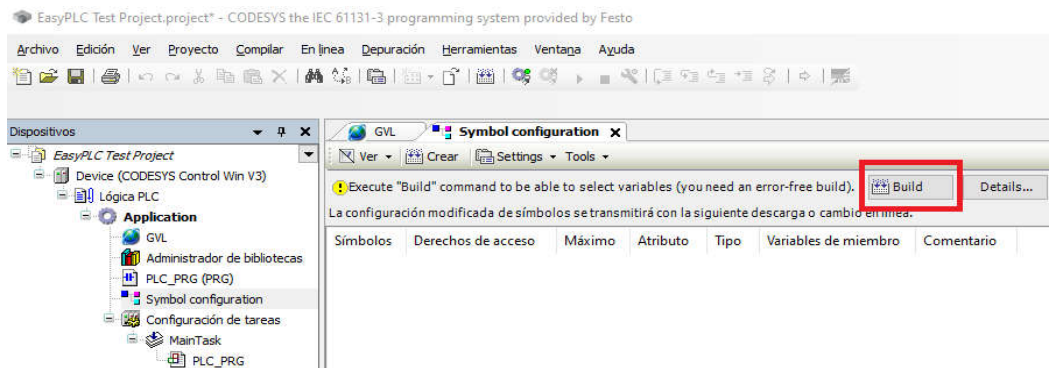
8. Mouse right button click over Application, form menu select Add Object -> Symbol configuration



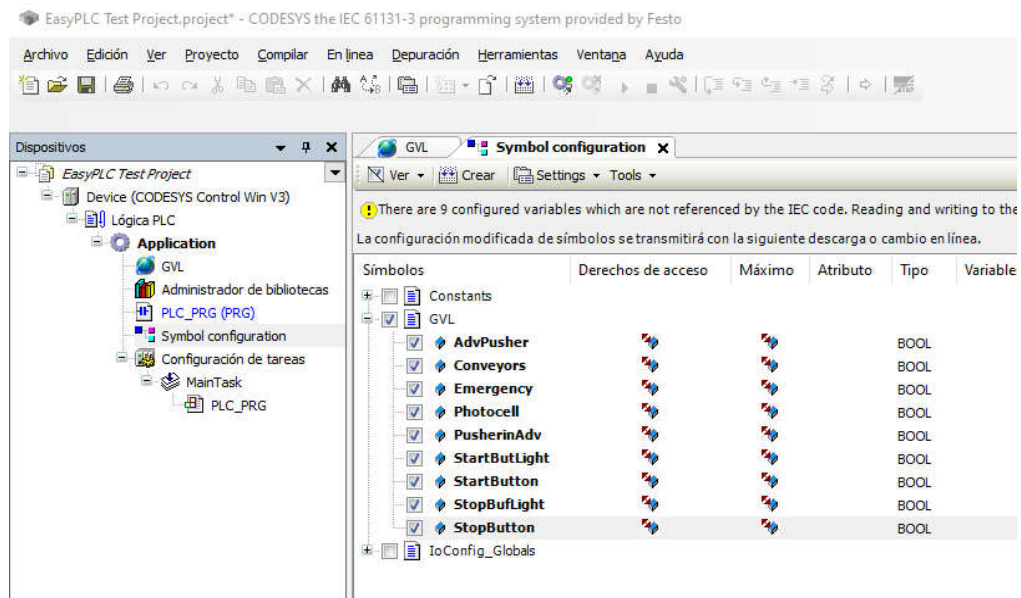
## 9. Click Add



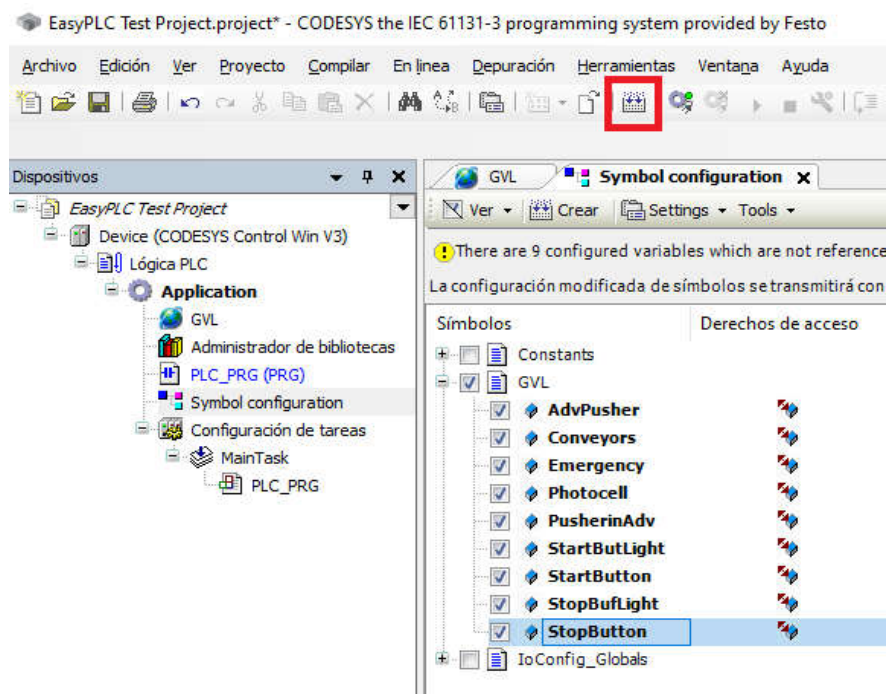
## 10. Click Build



## 11. Mark the check box for **ALL THE VARIABLES**

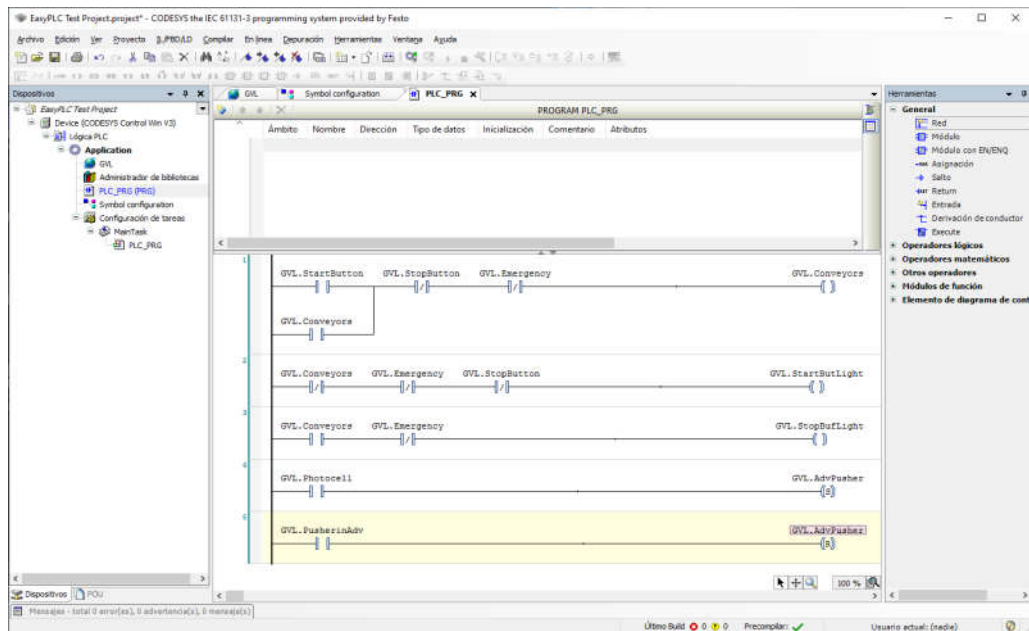


## 12. Press Compile icon button

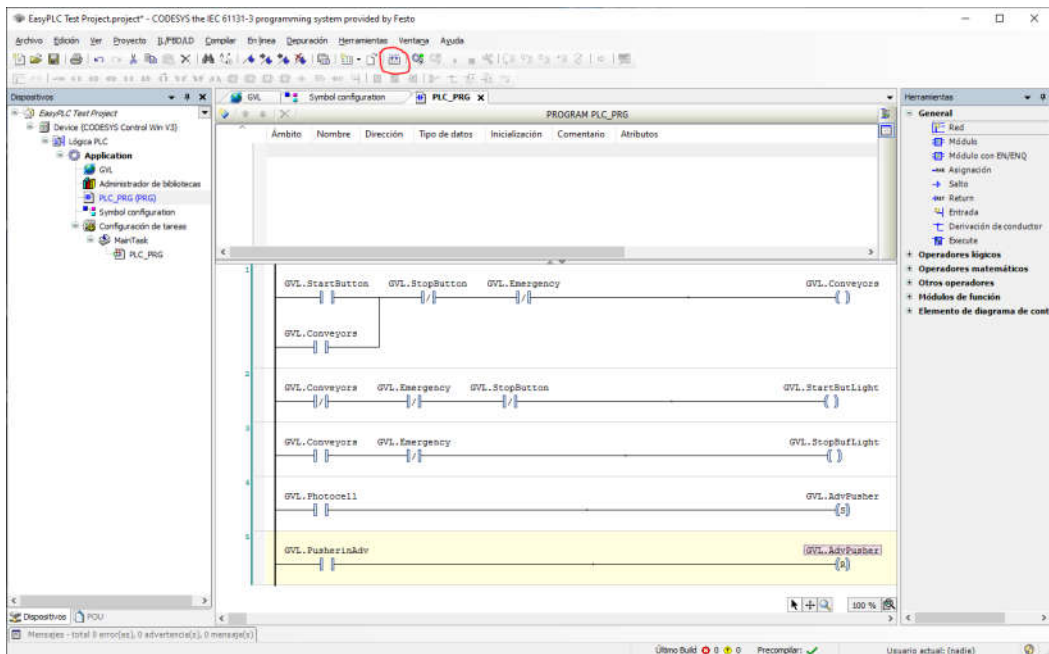




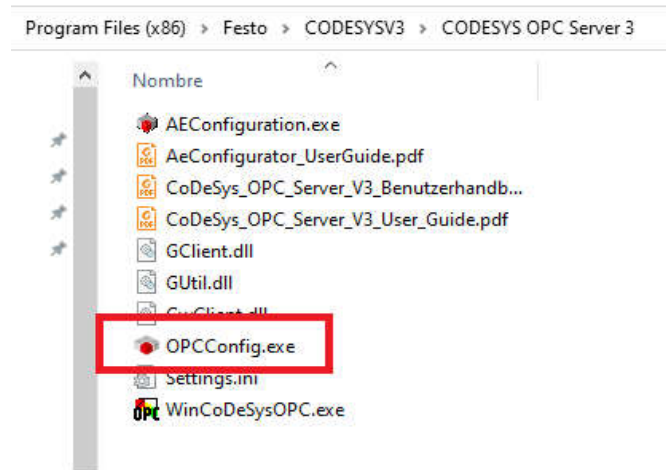
### 13. Now create the following ladder Logic Program



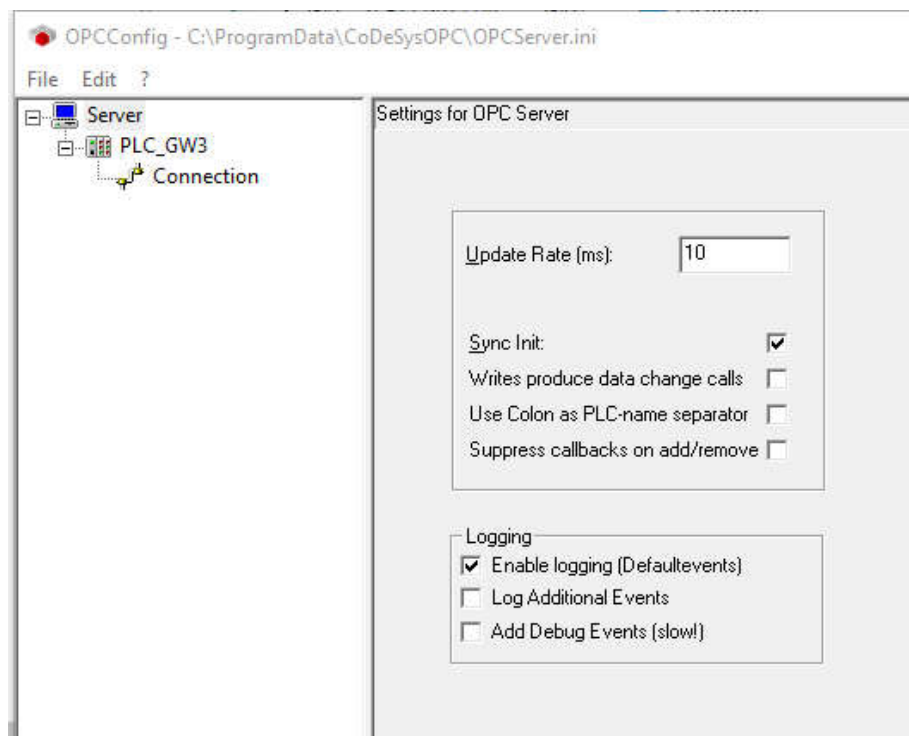
### 14. Compile the program, press the compile toolbar icon



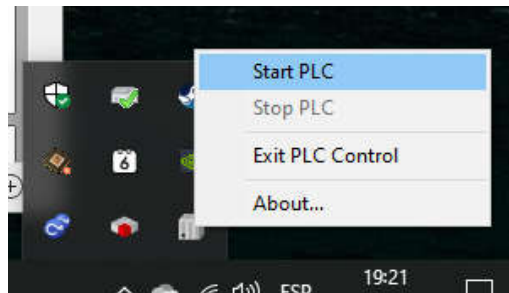
15. Go to your Codesys installation folder and execute OPCConfig.exe



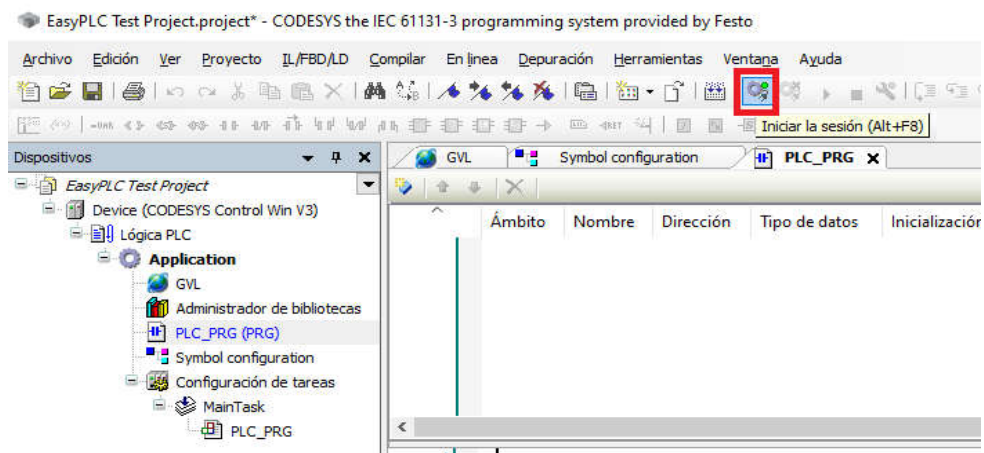
16. Type 10 in the Update rate (ms) field, then click File -> Save



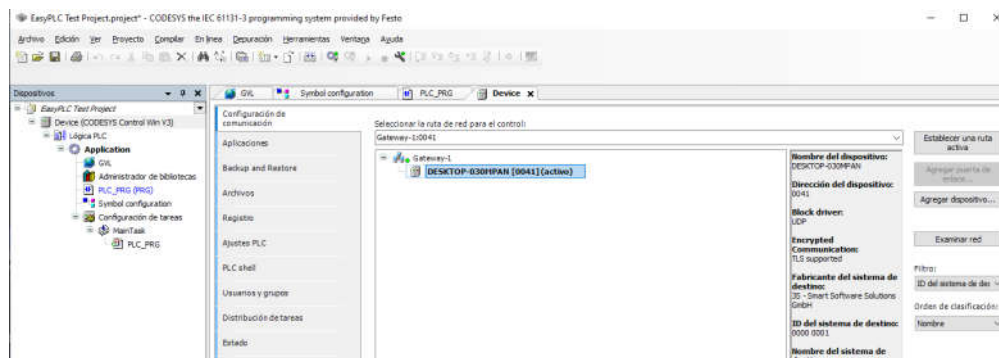
17. Go to the Windows system Tray -> right mouse click over the icon Codesys Win SysTray and click in Start PLC



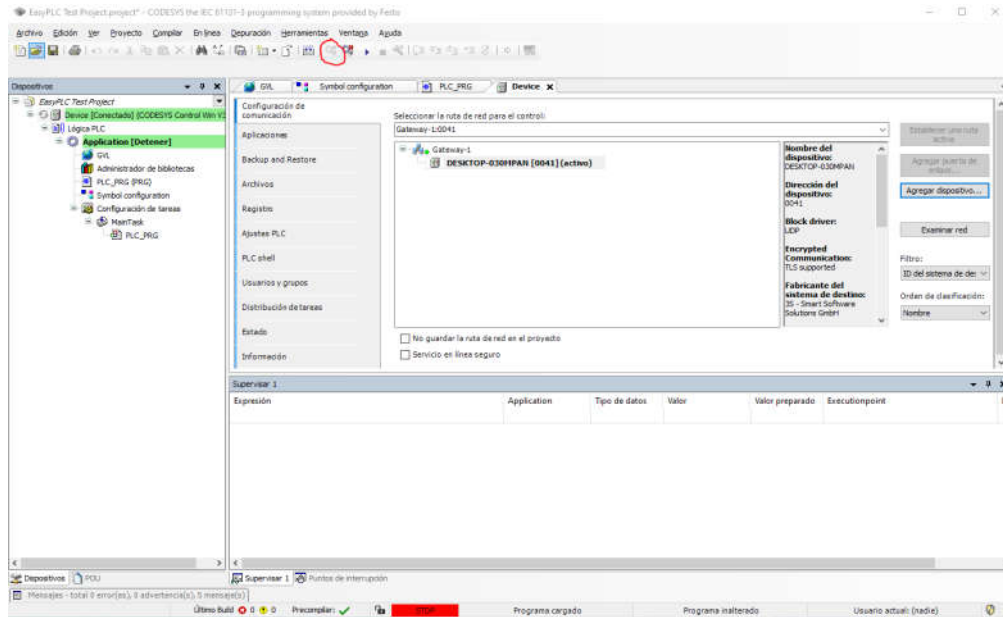
18. Click over Start Session icon



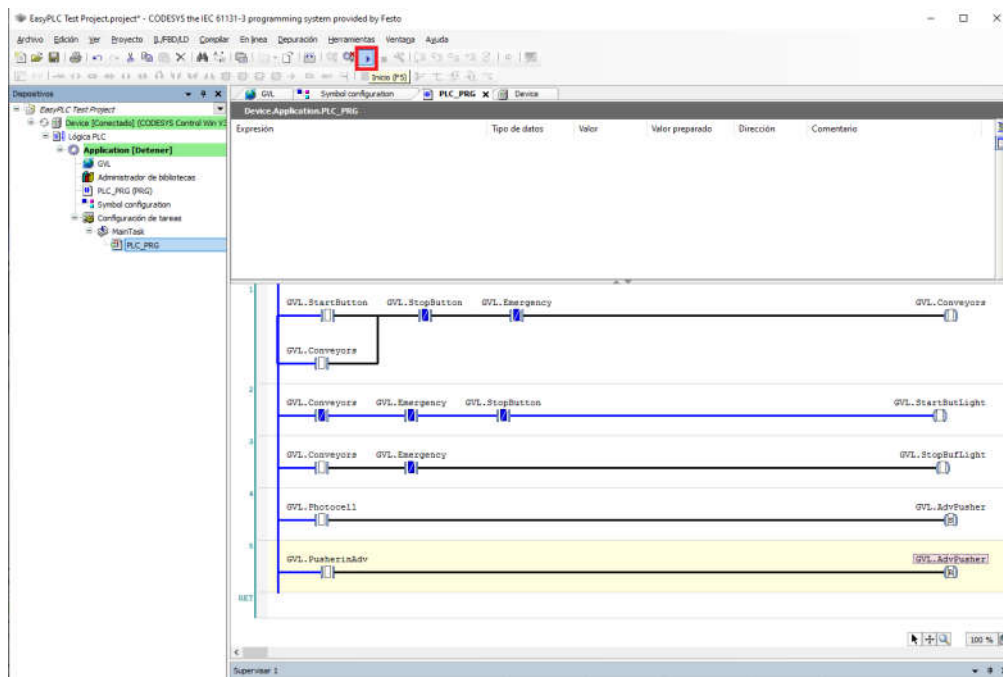
19. Select your active Path and click over the button 'Establish an active route'



20. Click again in Start session, then CodeSys will connect with the PLC

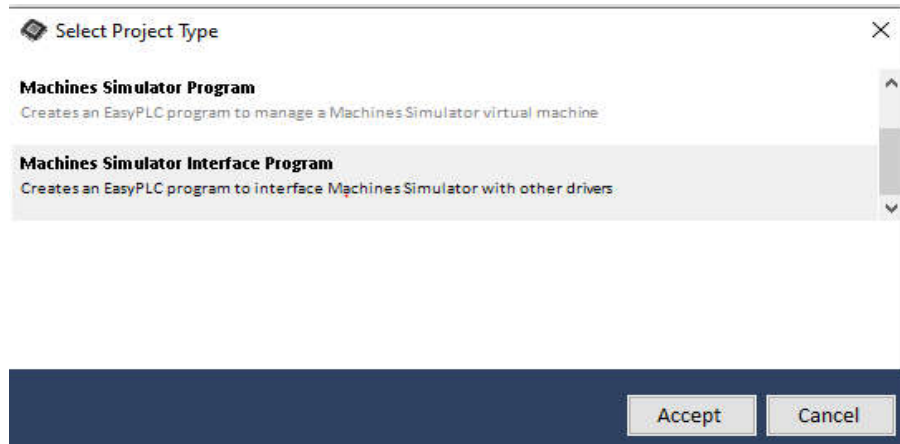


21. Now Play icon (start) to start the simulation

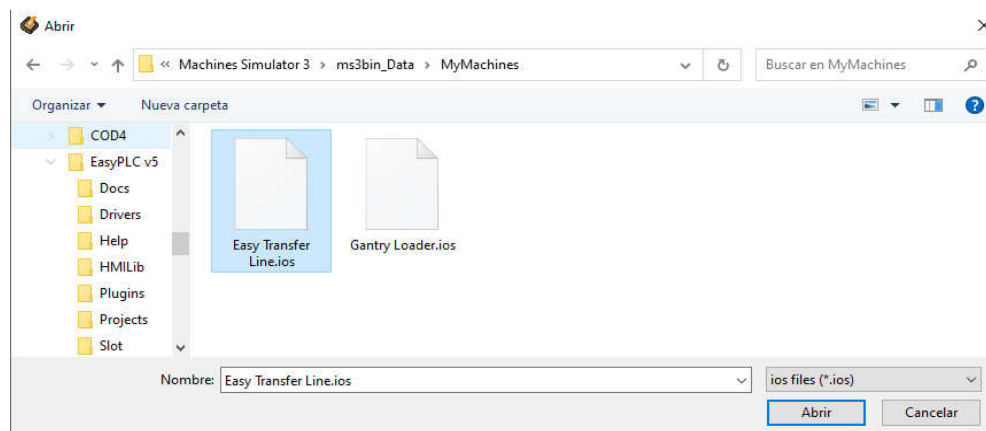
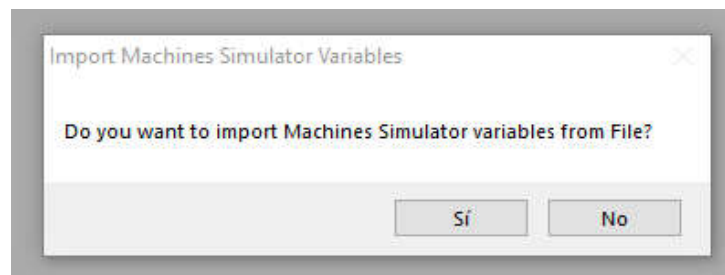


CodeSys will be now ready!

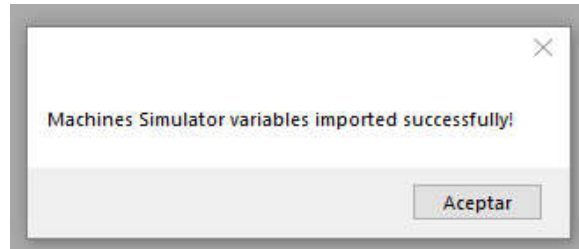
22. Now Open EasyPLC and create a new Machines Simulator Interface Program



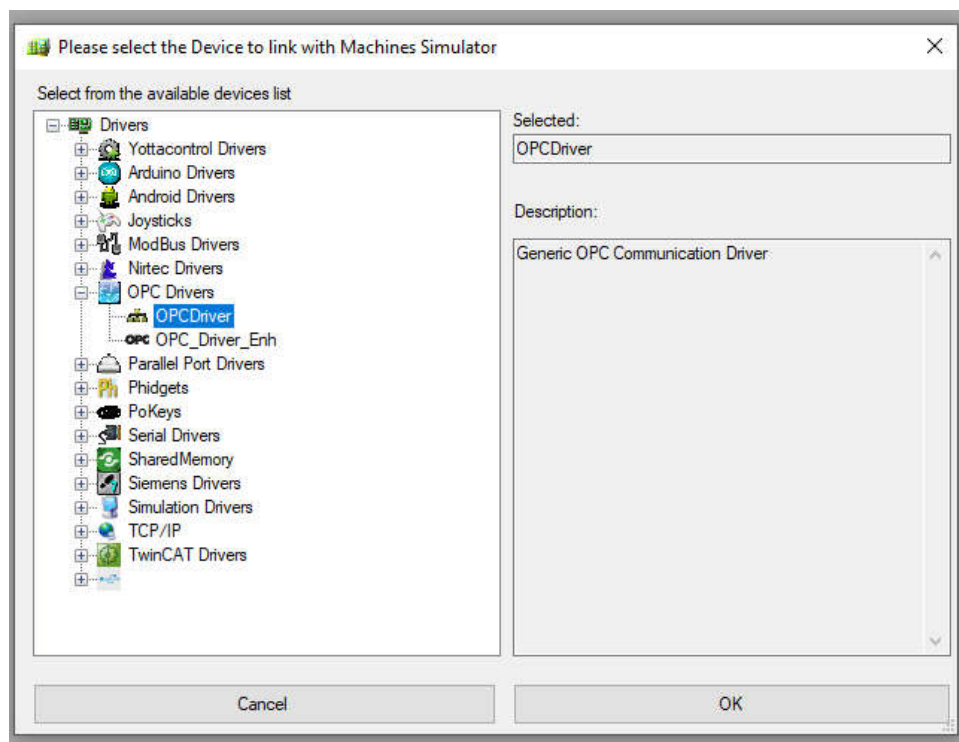
23. From the dialog box ***Do you want to import Machines Simulator variables form file?*** select yes and from Machines Simulator MyMachines folder, select the file Easy Transfer Line.ios (if is nor present in you system, open the machine Easy Transfer Line with Machines Simulator and in the Editor export the I/O variables list).



24. If all was ok, the following message appears

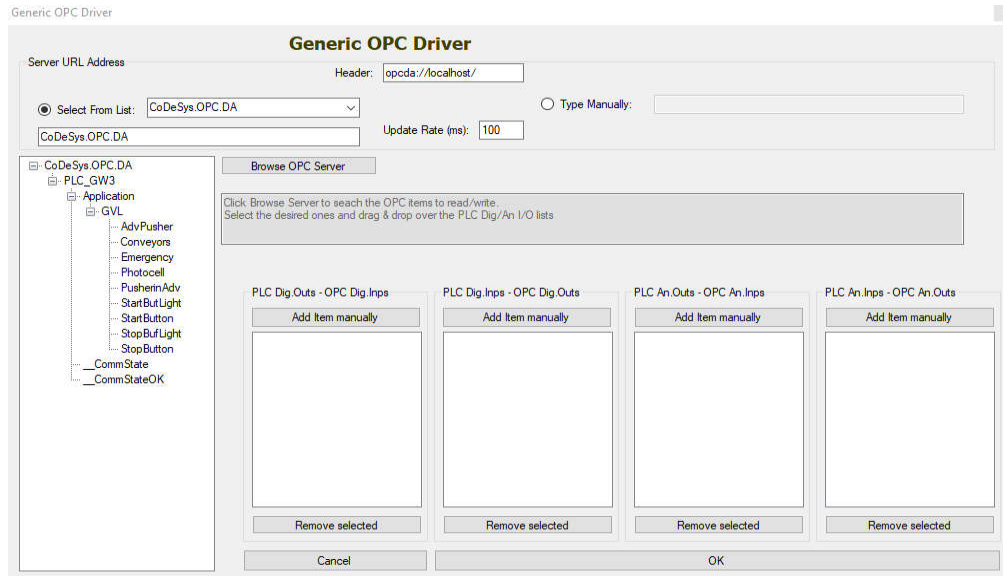


25. Now, from the Select device to link with Machines Simulator window select OPC Drivers -> OPCDriver, then click OK

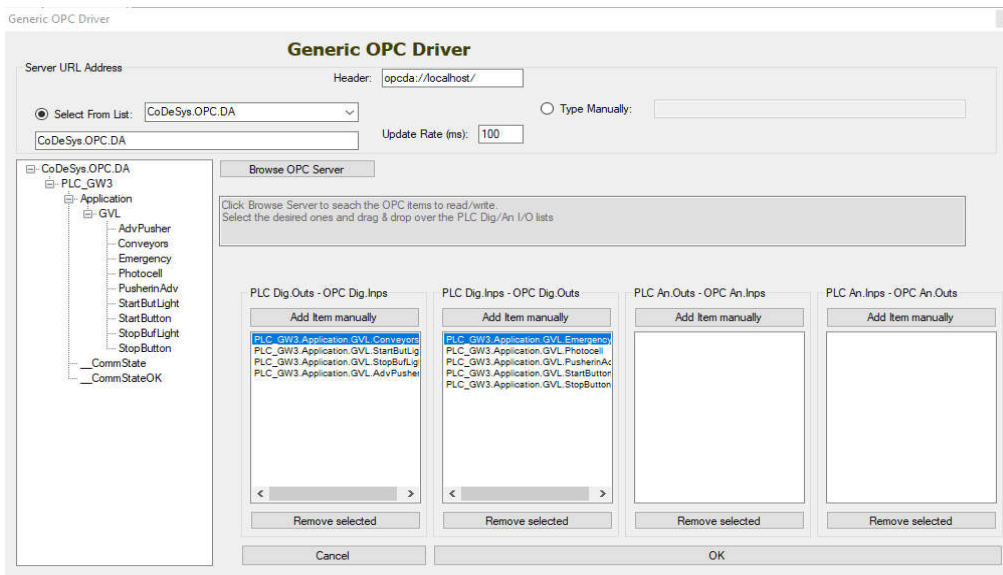


26. The Generic OPC Driver Configuration window will appear.

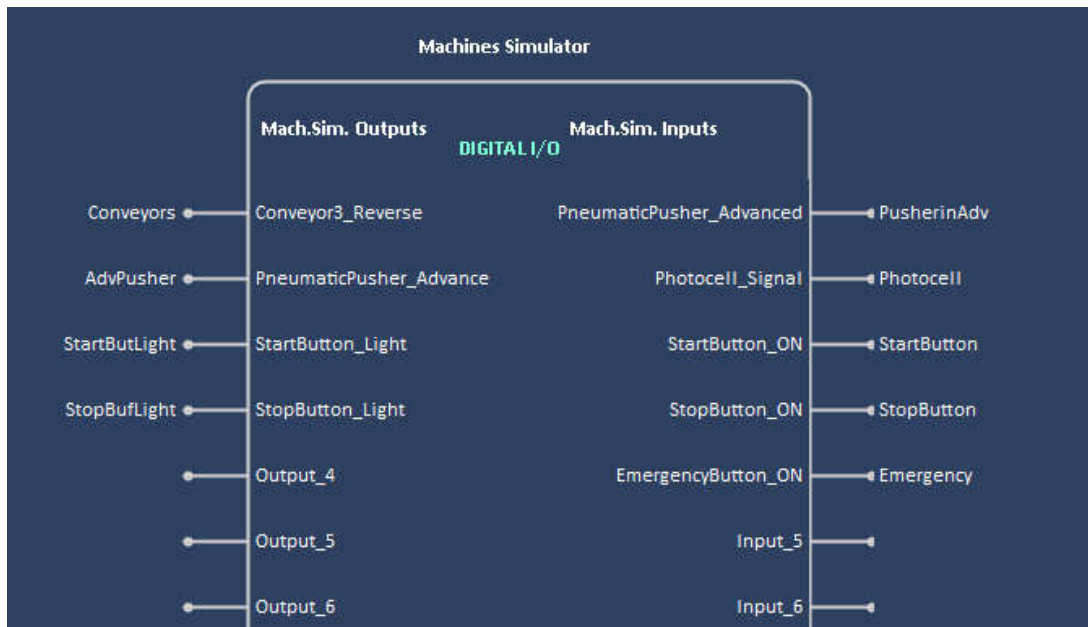
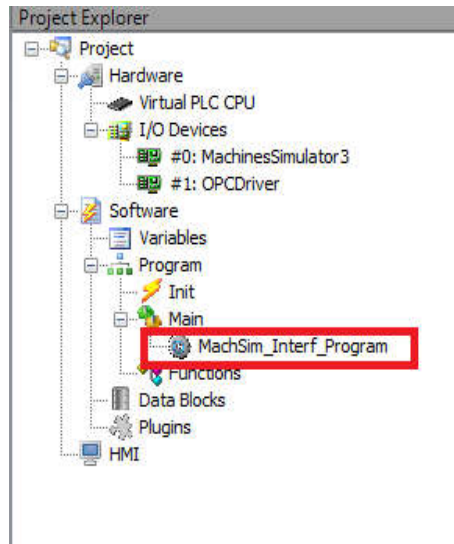
- Select from list (Left Radio option) the detected OPC Drivers, if you have followed the previous steps, in the combo box, you must select CodeSys.OPC.Da
- Now click on the Browse OPC Server, after a seconds, the left tree will be filled, open the nodes after you see the Codesys program variables



- Drag and drop the variables same as in the following image, then press OK

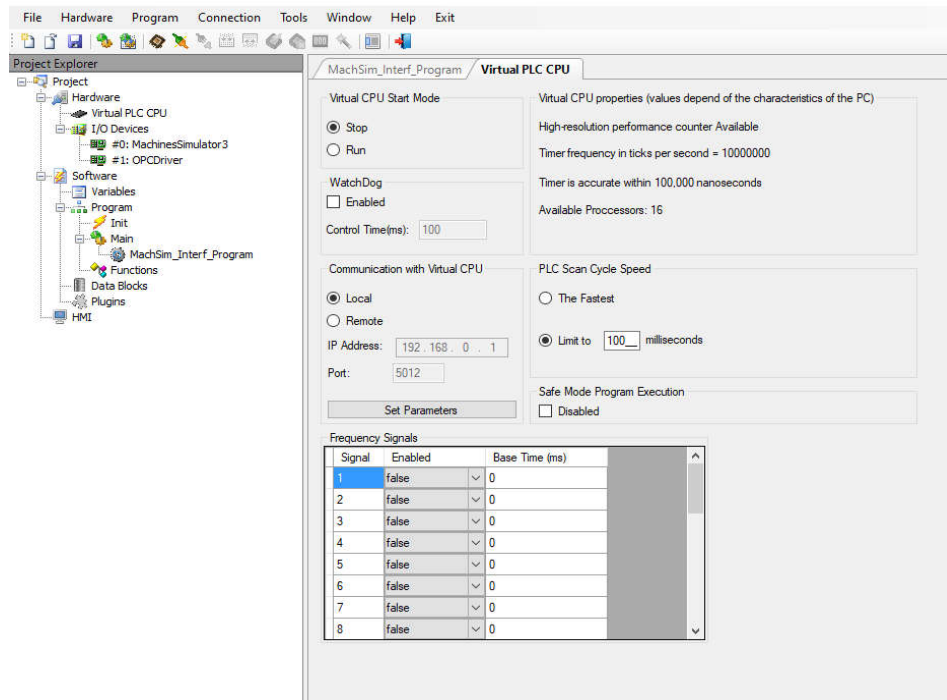


27. Now click in the MachSim\_Interf\_program and drag ann drop the variables in the following way

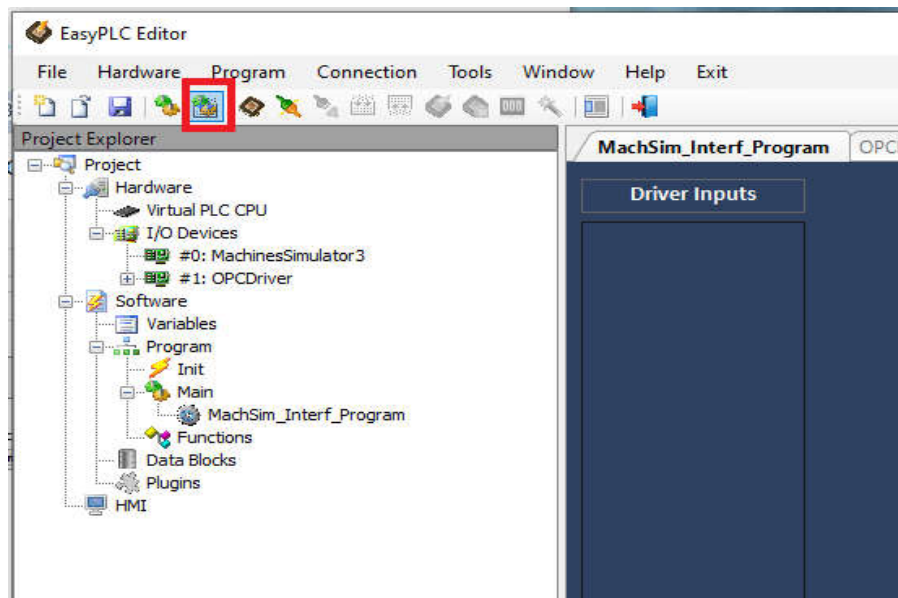




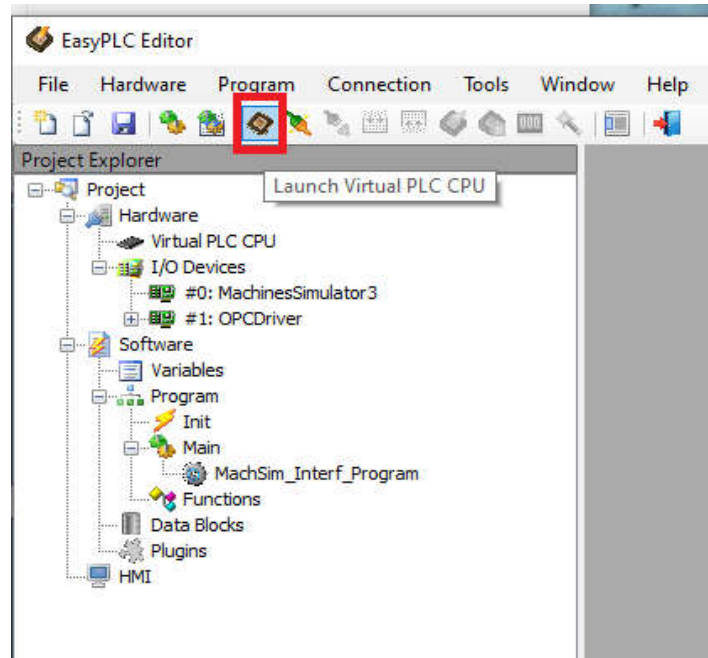
28. Click in left tree Hardware -> Virtual PLC CPU, then select in the PLC Scan Cycle Speed -> Limit to, and type 100 (milliseconds)



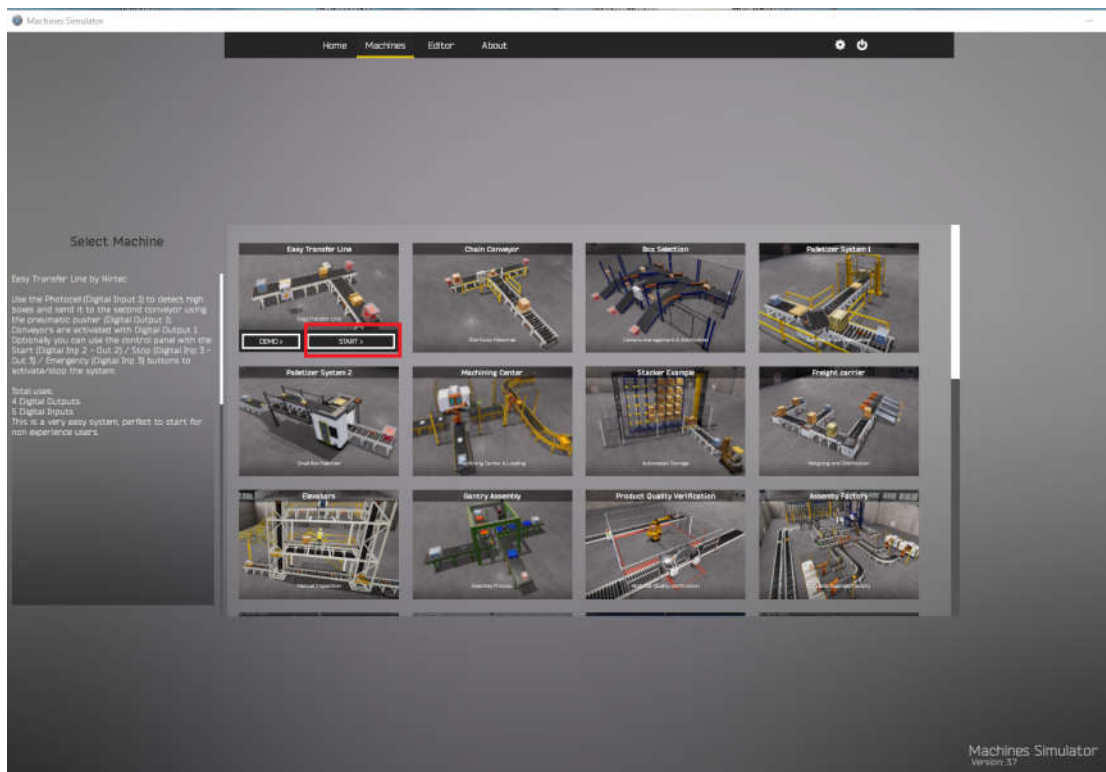
29. save the program, Compile & Transfer the project



### 30. Launch Virtual PLC CPU



### 31. Open Machines Simulator and open the machine Easy Transfer Line



## 32. Press Start PLC and the machine will be managed by Codesys!

