

CODESYS v2.3 TESTING AND CONNECTING WITH FLUIDSIM THROUGH EZOPC 5.5

1. For this SETUP you'll need to download and install these programmes (mail me for the links mreuz99@gmail.com):
 - **CODESYS v2.3**
 - **FluidSim**
 - **EzOPC 5.5**
2. **DISCLAIMER: THIS IS A TEST ENVIRONMENT THAT I TESTED MYSELF WITHOUT ANY ISSUE I WILL NOT BE RESPONSIBLE FOR ANY DAMAGE OR PROBLEMS WITH YOUR PC.**
3. After you've done installing all the programmes, you can open **Start EzOPC 5.5**, make sure the **simulation is on FluidSim**, and the controller is **CoDeSyS v2.3**. After that leave it as it is open.
4. **Open CODESYS v2.3**
5. Open a new project, select **PLCWinNT v2.4** or what version you have it's fine
6. Now go to **Online -> Communication Parameters**, delete every connection. Make a new one and select **Tcp/Ip level 2 Route** then click OK.
7. Close the **Communication Parameters**, open **OPC Configurator (the v2.3)**.
8. If you have some plcs connected to the server and you don't need them, delete them.
Append a new PLC, Name the Project as the Project you created before. Go to **connection** and **Edit**, select the **Tcp/Ip** you created before, click OK and save it
9. **Close OPC Configurator.**
10. **Open FluidSim**, go to **Options -> EasyPort/OPC/DDE connections ->** Make sure to check the box with **OPC and enable events**.
11. **Open FluidPy** and write your sequence. It will show you the **ST code** and the **Connections to do in FluidSim**.
12. Now draw your circuit, select the **OPC server** for the **IN and OUT plc blocks**, make sure to select **EzOPC.2**. Browse the item of each plc block, click everytime on **CoDeSyS** and select the variable that **FluidPy** has choose for you (e.g. **AB0, EB0, AB1**, etc..). You can also write it by hand if you don't find it.
13. **Go now to CODESYS, open the Global Variables**, paste there the **BYTE VARS** of the **FluidPY ST code** you generated before.
14. Paste the **BOOL VARS** in the **Local Variables** of the project.
15. Now go to **Project -> Options -> Symbol Configuration -> Check the 2 boxes and click on Configure Symbol File -> Select the Global Variables Folder and check export variables as object, do the same with the PLC_PRG Local Variables then click OK.**
16. Now copy and paste the **ST code on CODESYS**, **build** the project -> 0 errors right? Nice.
17. **Open PLCWinNT SP programm**, click **ok** on the 2h DEMO, click now to **Login** in the **CODESYS** programm, come back to **PLCWinNT** and see if the project is loaded. Now click **Start**. Your **PLC** now is **running**.
18. **Go back to your FluidSim** circuit and start it. Now go to **EzOPC 5.5**, it should say **Project Start: Name_of_your_Project**. Is it? Perfect. Now you can click the **start** button of your circuit and see if it's working. Enjoy it !