

How to fix the lag between CCW Micro800 SIM and FIO

I am sure, you might have experienced the lag between FIO and Micro 800 SIM. FIO support team is aware of this fact as well which you can read here. They are suggesting the users to use real PLC to fix the lag.

There is a work around to fix the lag.

Solution 1 (Easy)

Try to **run the FIO Simulation when CCW is offline** (after downloading the program to Micro 800 SIM).

This will not remove the lag 100% but it will reduce it **significantly**.

Check out the video named **“Solution 1.ts”** shared in the resources to see the difference.

Solution 2 (Complicated)

In the second solution, you can use **Node-RED** as a gateway to connect Micro PLC SIM (via API) and write to FIO (via MODBUS TCP)

It is recommended to have a basic knowledge of Node-RED

In this case, Factory IO act as MODBUS Server and Node-RED as MODBUS Client. This will reduce the lag significantly and you can also watch the program in the Online mode simultaneously.

Check out the video named **“Solution 2.ts”** shared in the resources to see the difference.

I am providing the Factory IO program, Node-RED flow and CCW program for you reference. Download the files from **“CCW_FIO.zip”** shared in the resources.

Note: I am using Software loopback for ethernet connection, so kindly use that to avoid any issue.