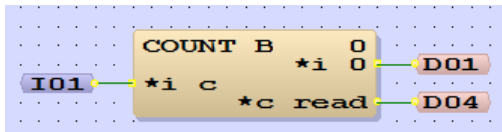


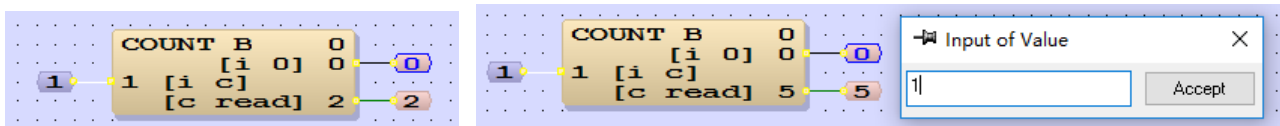
TT190901 – FUP - Runtime Module

1. To calculate the equipment runtime, we can use the “COUNT_B” module. First, add a new FUP page called “runtime.f”

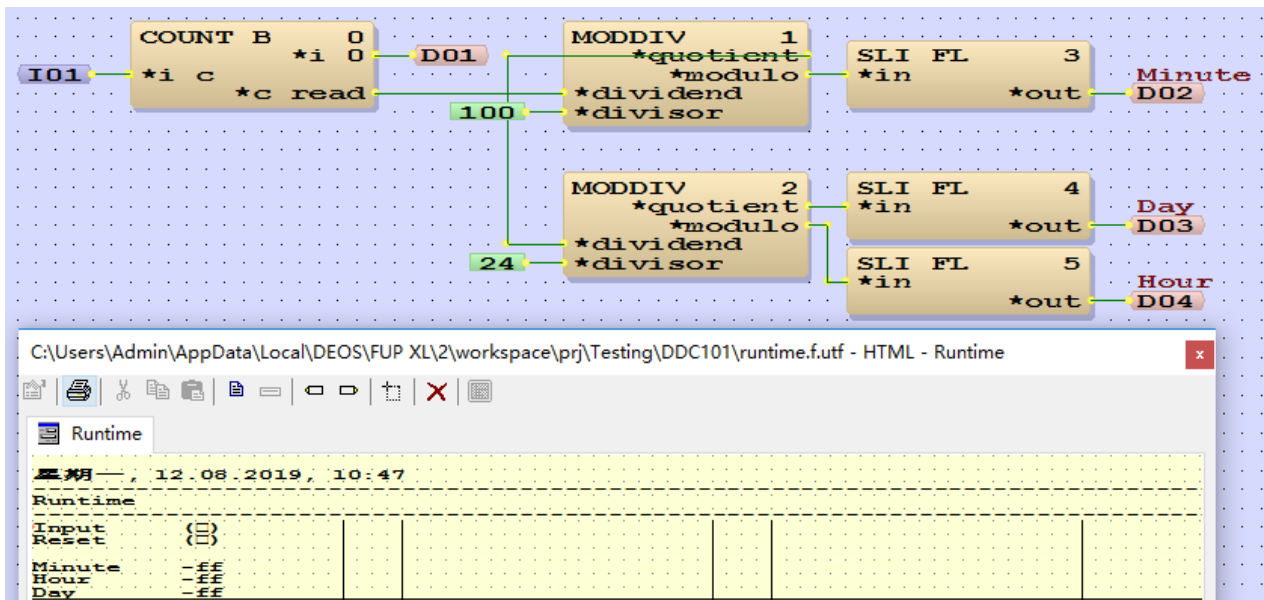


2. Connect the input “i_c” to the equipment status, and connect a “Display” to the “i_0” to reset the counter. Set the “Updating” to “Read and Write” so that you can reset the counter manually. The output “c_read” is the runtime in minute as type SLI

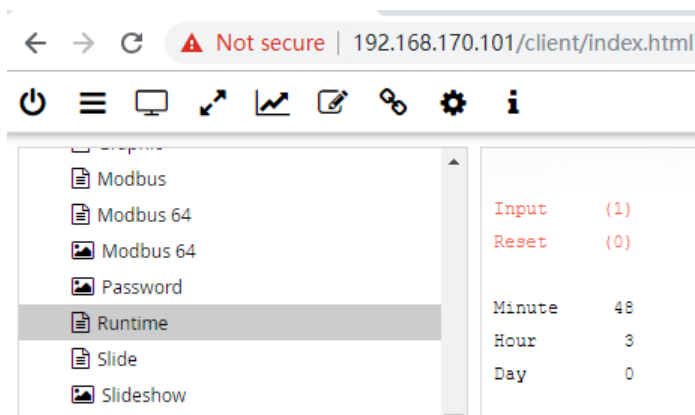
3. Try simulation and set the “Input” as 1, and you can see the output increase by 1 every minute. Please note that the counter will change to “100” when it counts to 60 minutes, and then 101, 102 afterwards. Input “1” to the “i_0” to reset the counter to 0



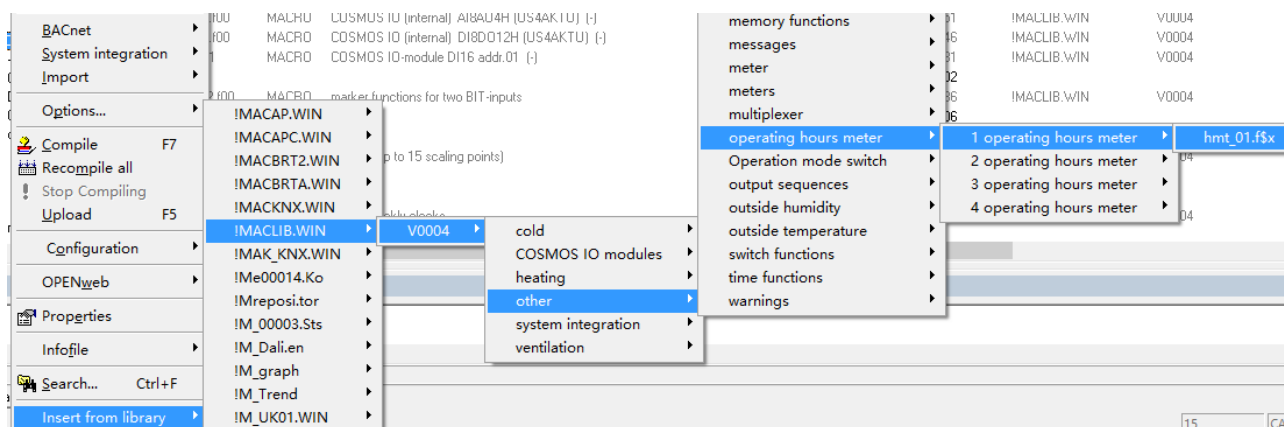
4. To calculate the running hours and days, we use the logic below. Please note that the counter is divided by “100” to calculate the running hours (not 60). Since both “COUNT_B” and “MODDIV” modules use type SLI, we then use the “SLI_FL” module to covert the number to floating point



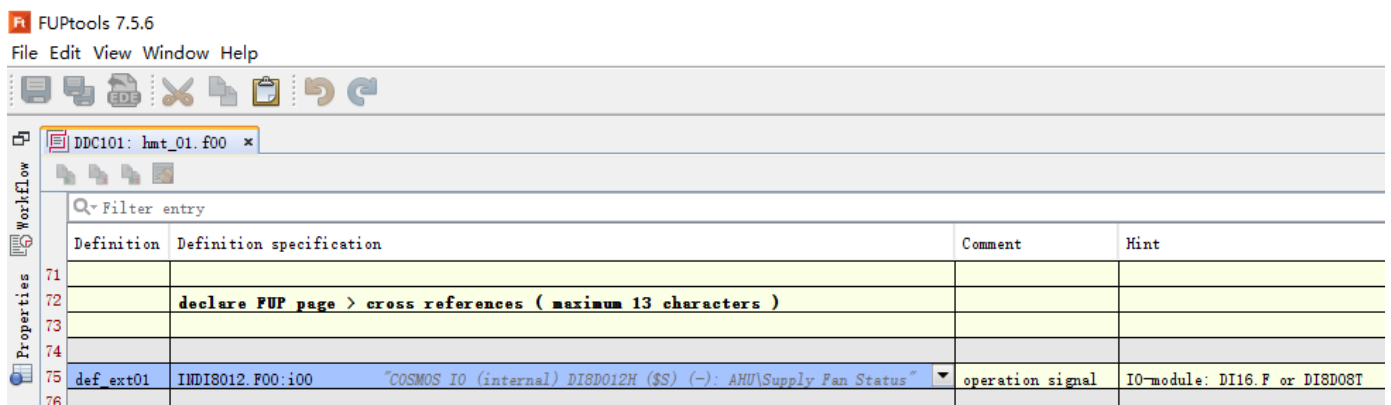
5. Compile and upload to the controller



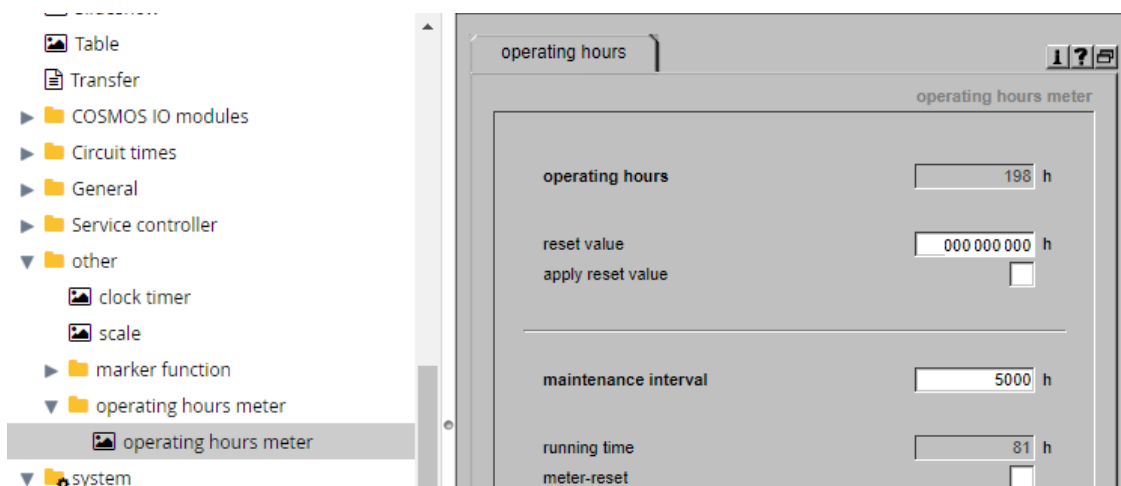
6. You can also use our macro called “hmt_01” for this purpose. First, add it to your controller



7. Connect the input to your equipment status point



8. Compile and upload to the controller. It's under “other”, “operating hours meter”



9. Click the “Apply reset value” to reset the operating hours to 0. You can reset it to any value by typing the hours you want in the “Reset value”, and then click reset
10. You can also set the “Maintenance interval” so that an alarm will come up when the running hour is more than the maintenance hour. To reset the alarm, click the “Meter reset”. To disable the alarm, type 0 in the “Maintenance interval”

maintenance interval	<input type="text" value="5000"/> h
running time	<input type="text" value="81"/> h
meter-reset	<input type="checkbox"/>