

TT220303 – FUP - Global Setpoint Reset

1. For room temperature control, e.g. FCU, user can manually change the setpoint on the room thermostat. Sometime customer wants to reset all the FCU temperature setpoint at night, so that the building can save some energy. This can be done easily with the FUP module "RESET" and "ANA_MUX_2".

RESET

reset

purpose

This module creates a reset impulse of adjustable time.
"RESET" sets independently the input to null after run of the given time.

FUP module

```
RESET 0
*t reset
*input
*output
```

t_reset reset time in 1/100s
input digital input - RESET
output digital output - RESET

ANA_MUX 2

analog multiplexer

purpose

Writes for 'selector' = 0 the value 'e_0' and for 'selector' = 1 the value 'e_1' to the output.
For example ANA_MUX_2 is used if with the digital output of a time switch the set value for a controller has to be switched.

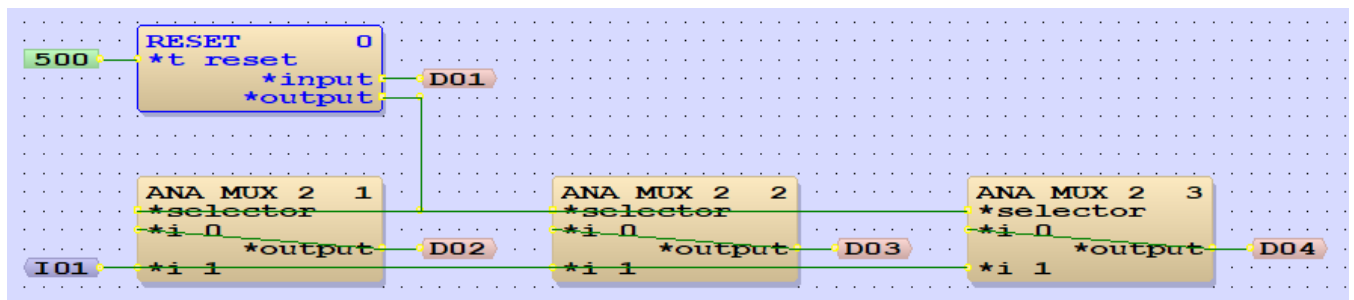
There is following correlation:

selector	output
0	i_0
1	i_1

FUP module

```
ANA_MUX 2 0
*selector
*i_0
*i_1 *output
```

2. The below FUP page has 3 temperature setpoints that you can change individual (D02 to D04). I01 is the global setpoint and D01 is the enable button for the global setpoint reset. Please note there is a link between the "i_0" input and the "output" of the "ANA_MUX_2" module.



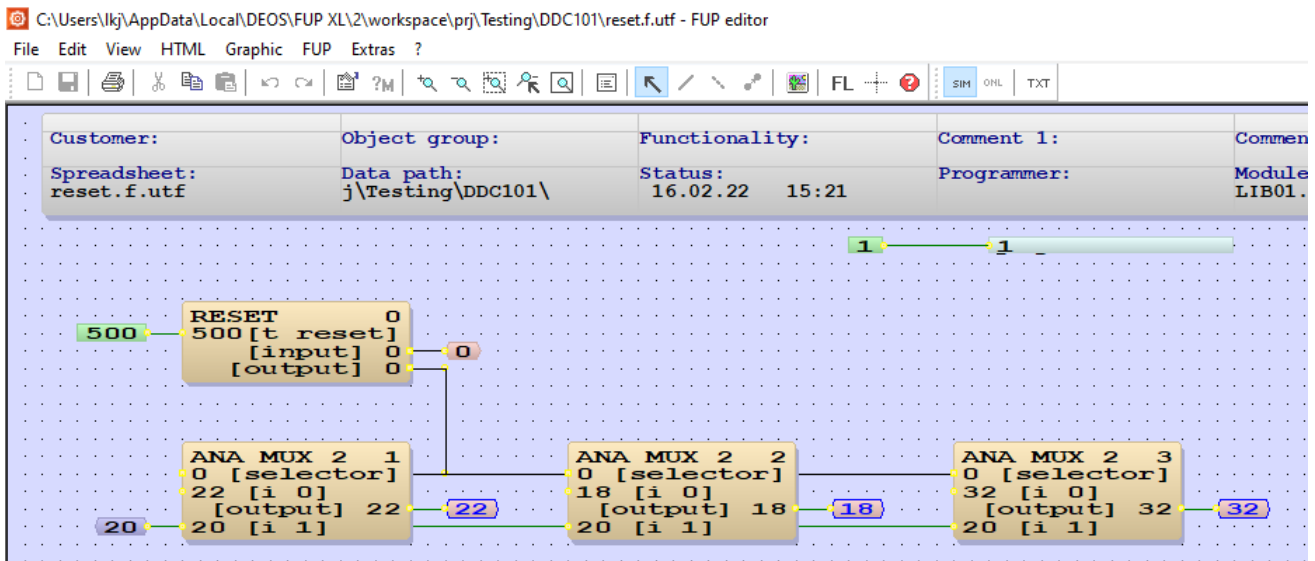
3. This is the HTML page. Make sure you set the "Updating" to "Read and Write" for the individual setpoints as well as the "Enable Global Reset".

The screenshot shows the HTML page for the Global Setpoint Reset configuration. The page title is "Global Setpoint Reset". The content includes a table with the following data:

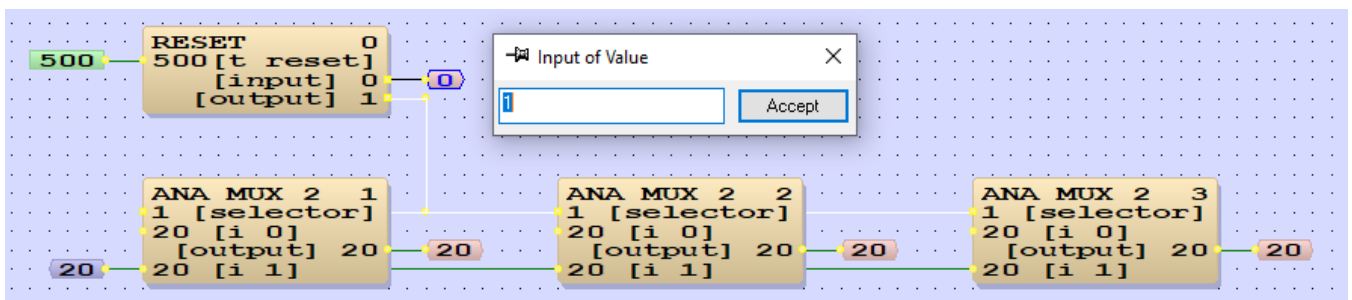
Global Setpoint Reset	(H)
Enable Global Reset	-ff
Global Setpoint	-ff
Setpoint 1	-ff
Setpoint 2	-ff
Setpoint 3	-ff

The Properties dialog box is open, showing the "Access/Option" tab. The "Type" is set to "FL". The "Bus" is set to "Simulation value". The "Updating" is set to "Read and write".

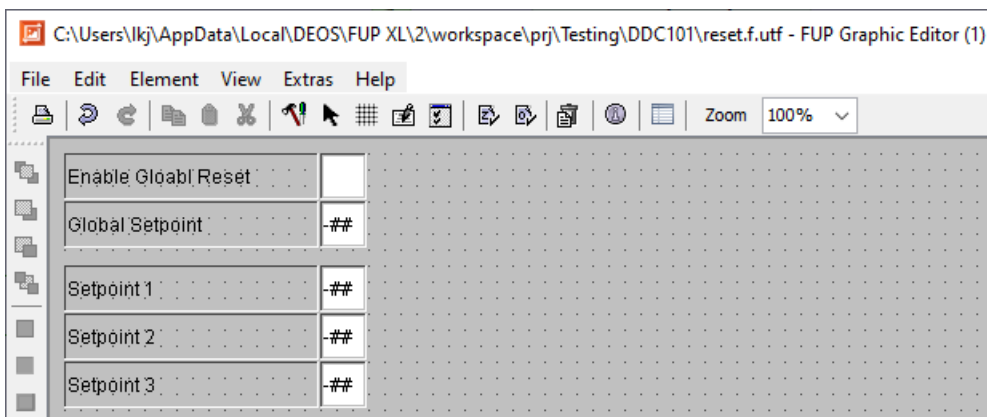
- Now you can try it in simulation mode. When the “Global Reset” is 0, you can change the setpoints individually. The “Global Setpoint” is blocked by the “ANA_MUX_2” module, because the “selector” input is 0.



- When the “Global Reset” is set to 1, the “output” of the “RESET” module will be set to 1 for 5 seconds (because the “t_reset” input is 500). This is then passed to the “selector” of the “ANA_MUX_2” module, and therefore the “Global Setpoint” (i.e. “i_1” input) will be sent to the “output” to reset the individual setpoint.



- After 5 seconds, the “output” of the “RESET” module will be 0 again, and then you can change the individual setpoint freely afterward.
- A simple graphic page was added using the checkbox graphic element for the “Enable Global Reset”.



- Just link them to the Input and Display respectively. Make sure you select “Read and Write” for the “Updating” property of all the points.

Properties

General Access/option Expanded

Name: FUP:D01

Information text:

☐ Use the information text as log text

Type: CheckBox00 Updating: Read and Write

9. Now you can test it on the graphic page in simulation mode.

C:\Users\lkj\AppData\Local\DEOS\FUI

Enable Gloabl Reset	<input type="checkbox"/>
Global Setpoint	20
Setpoint 1	21
Setpoint 2	22
Setpoint 3	23

C:\Users\lkj\AppData\Local\DEOS\FUP

Enable Gloabl Reset	<input checked="" type="checkbox"/>
Global Setpoint	20
Setpoint 1	20
Setpoint 2	20
Setpoint 3	20