

TT210402 – FUP - Page Header

1. In FUP, when you open a controller, you can see there is a lot of information in our standard macro, the information can help you organize the FUP pages easily

FUP page na...	Status	Functionality	Object group	Date modified	Macro source ...	Macr...	Macro source FUP	Programmer
eval1.f00	MACRO	evaluation module for meters (int...	other	21.11.16 07:41	!MACLIB.WIN	V0004	eval1.f\$x	Gruhle
ex_pu_2v.f...	MACRO	dual pumps (external control)	ventilation	17.01.18 11:53	!MACLIB.WIN	V0004	ex_pu_2v.f\$x	Gruhle
hmt_01.f00	MACRO	operating hours meter	other	03.12.14 10:04	!MACLIB.WIN	V0004	hmt_01.f\$x	Gruhle
ina18ao4.f00	MACRO	COSMOS IO (internal) AI8AO4...	COSMOS IO modules	11.04.17 13:51	!MACLIB.WIN	V0004	ina18ao4.f\$x	Gruhle
indi8o12.f00	MACRO	COSMOS IO (internal) DI8DO1...	COSMOS IO modules	11.04.17 14:46	!MACLIB.WIN	V0004	indi8do12.f\$x	Gruhle

2. The information is contained in the “FUP Page Header” and you can edit it in the FUP page

C:\Users\Admin\AppData\Local\DEOS\FUP XL\2\workspace\prj\Testing\DDC101\ex_pu_2v.f01.utf - FUP editor

File Edit View HTML Graphic FUP Extras ?

Customer: Object group: Functionality: Comment 1: Comment 2: Comment 3:
 Spreadsheet: Data path: Status: Programmer: Module lib path: SUB# dual pumps
 EX PU 2L.F\$X.FUP OPEN.004\LUFTUNG\ 17.01.18 11:53 Gruhle LIB01.FUP Executing cycle: SECONDN

3. Normally, when you create a new FUP page by your own, all the information is empty. You can edit it by right click the “Page Header” and click “FUP Page Header”

Customer: Object group: Functionality: Comment 1: Comment 2:
 Spreadsheet: Data path: Status: Programmer: Module lib path:
 ahu.f.utf j:\Testing\DDC101\ 24.05.19 11:31 LIB01.FUP

1

AHU\Supply Fan Status
INDI8O12.F00:i00 — D01

AHU\Supply Fan Trip
INDI8O12.F00:i01 — D02 — AHU Supply

clock timer enabl
clkfreel.f00:clock enablin

I AND 2
*in
*in i

2

Paste
Zoom In
Zoom Out
Scale to Graphic Size
Center on Mouse Cursor
FUP Page Header

4. One of the main functions in the header is the “Object group” which can help you group the FUP pages in FUP and OPENview tree views (together with “Info” and “Comment 3”). Please refer to TT201201 for details

Properties FUPBLATTKOPF

General Info

Customer: Object group: Programmer:
 %%%AAA

Functionality: Operating cycle:
 SECOND

Info:
 Group 2

Comment 1:

Comment 2:

Comment 3:
 SUB# Group 3

5. For the other properties, e.g. functionality, programmer, etc., they're mainly for comment purpose, and you can freely use them based on the needs. All of them can be sorted in the FUP page list, so that you can find them easily

FUP page na...	Status	Functionality	Object group	Date modified
pm3p.f01	Update ...	3 Phase Power Me...	Power Meter	04.05.20 11:44
ahu01.f01	Update ...	AHU-2F-01	HVAC	25.05.20 10:49
const.f	MACRO	assignment of the c...	General	21.09.17 13:36
chiller.f01	Update ...	Chiller 1	Chiller	09.12.19 17:02
chiller.f02	Update ...	Chiller 2	Chiller	09.12.19 17:02
chiller.f03	Update ...	Chiller 3	Chiller	09.12.19 17:02
chiller.f04	Update ...	Chiller 4	Chiller	09.12.19 17:02
chiller.f05	Update ...	Chiller 5	Chiller	09.12.19 17:02
chiller.f06	Update ...	Chiller 6	Chiller	09.12.19 17:02
chiller.f07	Update ...	Chiller 7	Chiller	09.12.19 17:02
chiller.f08	Update ...	Chiller 8	Chiller	09.12.19 17:02
chiller.f09	Update ...	Chiller 9	Chiller	09.12.19 17:02
load.f00	Update ...	Chiller Plant	Chiller	02.10.19 17:43
seq.f00	Update ...	Chiller Plant	Chiller	03.10.19 10:04

6. Another very important function in the header is the “Operating Cycle”

Properties FUPBLATTKOPF

General Info

Customer: Object group: Programmer:

Functionality: Operating cycle:

7. The default cycle time is 1 second, and you can change it using the combo box.

Operating cycle:

- EXECUTING CYCLE
- SECOND:0.25
- SECOND:0.50
- SECOND:0.75
- SECOND
- SECOND:2.00
- SECOND:4.00
- SECOND:5.00
- SECOND:10.00
- MINUTE
- HOUR

8. Depending on your application, you can change the cycle time of each FUP page from 0.25 second to 1 hour. Please note that it may overload the controller if you have too many complicate FUP pages (e.g. more than 100) running at less than 1 second cycle time, so please consult our Professional Support if you have such application
9. For time critical application, e.g. turn on the light using a push button connect to the DI module, you can set the cycle time to “Executing Cycle”. This means the FUP page will run as fast as possible
10. For this kind of application, you can use the “pushbtn.f\$x” macro in our macro library

V0004 cold

COSMOS IO modules

C500/C600 OPEN

CAN - actuators

CAN - modules

control panel

IO27 - module (RS485-BUS)

other

push button (event)

status (event)

19.02.20 17:23

13.03.20 14:20

Power Meter 04.05.20 11:44 IMACAP.WIN

COSMOS IO modules 25.10.17 10:34 IMACLIB.WIN

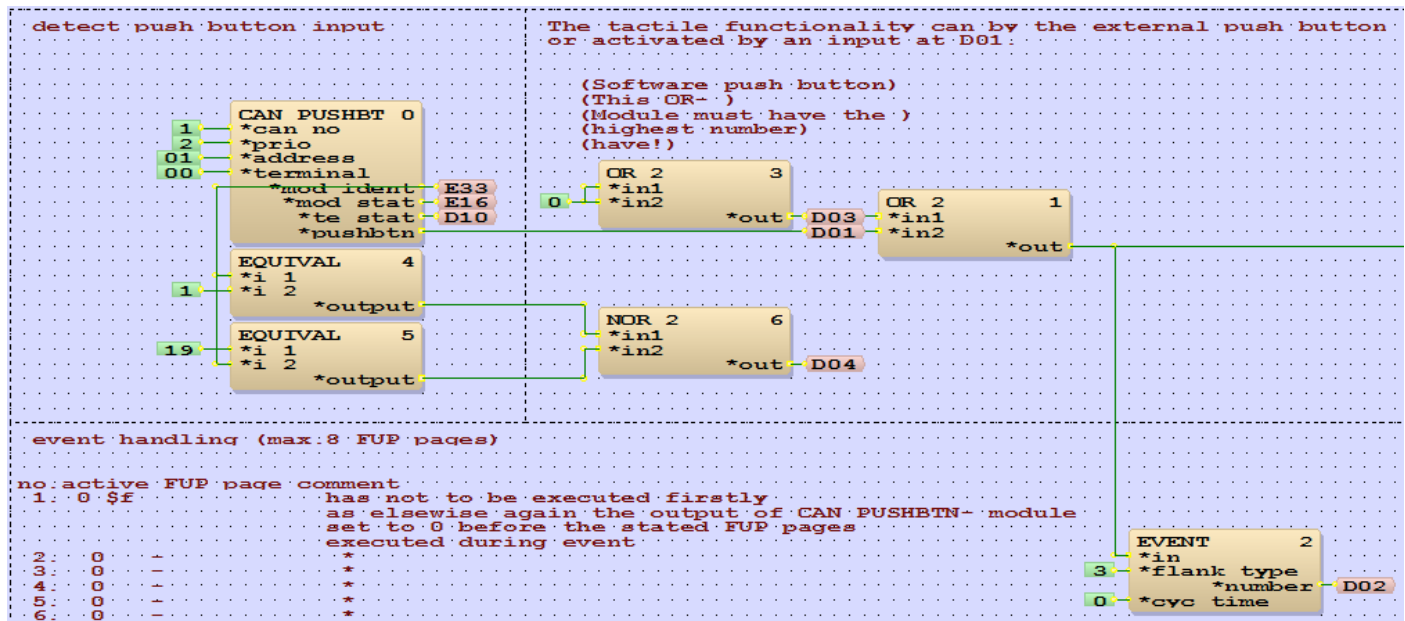
cold 16.02.17 07:33 IMACLIB.WIN

CAN bus DI-modules

pushbtn.f\$x

internal DI-module (COSMOS 500/600)

11. If you look at the macro in details, you can see that it is very simple, which is very important as you can't run a complicate FUP page in such a short cycle time



12. Basically, what it does is to check the DI module if the push button is push frequently. If it is, then it will trigger another FUP page to run using the "EVENT". You can refer to the help text of the module for details

Preview

Help Text

EVENT

purpose

Depending on the flank type the stated FUP-pages will be executed first at the next cycle by the input. For the FUP-pages of this module the circulation-type "SECOND:0,05" should be entered. By dint of this module the response time of an action can be shortened. E.g. if the LED of the pushbutton for the extra operation time has to switch directly by using, it has to be programmed as follows:

Program the input of the pushbutton on a FUP-page and connect the event module with the output of the pushbutton. State "SECOND:0,05" for the circulation of this FUP-page and state the FUP-page of the static heater and the FUP-page with the output of the LED to the event list. The flank-type has to be set to 3. Now the static heater and after this the digital output will be set by using the pushbutton after 0,05 seconds at the latest. The FUP-pages also have to be processed by the negative flank (flank-type = 3) to register the pushbutton pulse of the flank module "EXTRTIME" correct. When the value of the input "cyc_time" > 0 the event will be repeated cyclical as long as the input "in" = 1.

starting behavior: no event by the first cycle