

Making a new TCK from an existing one

▪ Open the LODU FSM

- On windows: `G:\online\ecs\Shortcuts38\TRG\TRGLODU\TRGLODU_UI_FSM`
- On linux: `/group/online/ecs/Shortcuts38/TRG/TRGLODU/TRGLODU_UI_FSM.sh`

▪ Open the LODU panel

- Double click on LODU

▪ Go to the tab 'Algorithm' and then to the sub-tab 'Recipes'

- Select the algorithm you want to start with
- Click on 'View Algorithm'
- Make sure this is really the algorithm you want to start with

▪ Go to the sub-tab 'Trigger Channels'

- Click on 'Load'
- Select the algorithm you want to start with

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- Go to the sub-tab 'Conditions'

- Click on 'Update' and then on 'Save'

- This is necessary even if you usually should not change anything here

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- The only thing you may be authorized to change here would be thresholds

- ✓ Find the right line

- Warning usually there is more than one elementary condition associated to a given input so make sure you get the right elementary condition (and not just the right input)

- Change the threshold in the column 'Condition' and click Enter (mandatory!)

- To the same in the column 'Name'

- ✓ Eventually change other thresholds

- ✓ Click on 'Save'

Making a new TCK from an existing one

- **Go back to the sub-tab 'Trigger Channels'**
 - Update the enables that you have to change
 - ✓ Make sure to select the right line
 - ✓ Right click ever in the column 'Phys', 'B1G' or 'B2G' depending on what you want
 - Update the downscaling fractions you have to change
 - ✓ Make sure to select the right line, left click in the column 'Rate'
 - ✓ Put the right number
 - This is in per mil so 1000 mean no downscaling and for instance 25 mean a downscaling of 1/40 (25/1000)
 - ✓ Click Enter (mandatory!)

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- Still in the sub-tab 'Trigger Channels'

- Click on save

- ✓ Write the name of the new algorithm

- Make sure this name is not already taken (see sub-tab 'Algorithm')

- '_0xABCD' (where 'ABCD' is the TCK number in hexadecimal) will automatically be appended to the name

- ✓ Eventually put a comment

- ✓ Write the TCK of the new algorithm

- As '0xABCD' where 'ABCD' is the TCK number in hexadecimal

- Make sure this TCK is not already taken (see sub-tab 'Algorithm')

Making a new TCK from an existing one

■ Go to the sub-tab 'Algorithm'

➤ Your new algorithm should appear in the list

✓ The list is in alphabetic order

➤ Select it and click on 'View Algorithm'

✓ Make sure you did the right changes

➤ Click on 'Export to file'

✓ Select your new algorithm

✓ Click on the single right arrow

➤ Click on directory icon

✓ Browse to the directory where you want to save the file

- For instance `G:\trg\IO\pvss\fwComponents_TRGLODU\panels\fwLODU\data`

✓ Write the name of the options file

- For instance `NewAlgo_0xABCD.opts`

(where 'ABCD' is the TCK number in hexadecimal)