# Controls Workflow in FLDT

Last Modified on 14/01/2019 3:40 pm CET

Working with **Controls** require the Controls tab in the ribbon to be selected.

FILE HOME	CONVEYOR	MODULES ENCLOSU	JRES CONTROLS	LAYOUT	DRAWING	VIEW	HELP
Assign & Edit Module ID	Add Link	Remove all Edit IO Mapping Export IO Mappings	Field bus PROFINET	•			

When modules and drive units are configured, distributed controllers can be linked to the modules.

#### Step 1: Assign Module ID



Click Controls *tab -> Module ID group -> Assign & Edit button* and a Assign & Edit Module ID panel is shown on right hand side.

**Tip!** the location of the panel can be adjusted to your liking by clicking and selecting the panel and then move it with the mouse. A docking panel shows how the panel can be placed in various positions.

Assign & Ed	it Module ID	×
Assign to see Enter base	elected conveyor name and then select conveyor to assign IDs to the modules on the conveyor.	
Next prefix	U100	
Increment	10	
C Edit selected Select mod Module Id	d component ule and enter new ID.	
<ul> <li>Options</li> <li>Update con</li> <li>Updates the</li> </ul>	veyor name	
Warning		
There	are 10 modules without an ID	
When the red	is button Assign to calcuted conveyer is active module ID numbering is	

When the radio button **Assign to selected conveyor** is active module ID numbering is automatically assigned for a selected conveyor. The base for numbering and the increment can be changed prior to selection. It is possible to edit any module by changing mode to **Edit selected component**.

**Tip!** the module ID can be visualized after assignment by using the checkbox **Visualize** in the Module ID group.



#### Step 2 Add Distributed Controller



Click **Controls tab -> Distributed Controller group -> Add** button and a distributed controller is loaded into the 3D world. It can be placed on compatible beams and on the floor by clicking on its requested location. Exit the command by pressing **Esc**.



**Tip!** The position of the Distributed Controller can be modified at any time by selecting the Distributed Controller and press the **Move** button in the Distributed Controller group.



## Step 3 Link Controller and Modules

Click **Controls** *tab* -> *Distributed Controller group* -> *Link button* and a **SCDC Placement** panel is shown on right hand side.

Selected controls device		
	SCDC 🔭 🗙 Available 8:DI, 4:DO, 4:IO	
Modules	sorted by distance from SCDC	
U113	7:DI 5:DO 🔺	
U112	3:DI 1:DO	
U114	3:DI 2:DO	
U102	3:DI 1:DO	
U110	3:DI 1:DO	
U101	4:DI 0:DO	
U103	7:DI 5:DO	
U111	4:DI 0:DO	
U104	3:DI 2:DO	
U100	3:DI 1:DO	

Linking is done for one controller at the time. Select one controller and assign modules. The first chosen module will be assigned as base module. A base modules IO mapping will correspond one to one with its electrical drawing. Additional assigned modules will then be linked as peripheral modules. In practice this means that the IO assignment will be dependent on available connectors on the distributed controller.

**Tip!** Base and peripheral module assignment can be changed at any time by right click on the module ID

Modules U113 U112	5	
U114 <i>(b</i> U102 U110 U101	Link as base module Link as peripheral module Remove link	
U103 U111 U104 U100	6	

Linked modules are visualized green and unlinked modules yellow if the Link mode is active.

The controller will be named according to its base e.g Base name U114 gives a controller named 1140A1.

Note that the list of modules will be sorted by the distance from the selected Controls device. Modules already linked to another controller will be marked as linked in the Modules list. ×



### Step 4 Edit IO Mapping - Optional

When using the Link functionality the IO assignment is done automatically. If, for any reason, the IO mapping is desired to be changed this can be done by using the Edit IO mapping functionality.



Tip! By using the **Reset** the **Edit IO Mapping** drop down all manual changes are removed for the selected controller.

Click **Controls** *tab -> Distributed Controller group -> Edit IO Mapping* and a Edit IO Mapping panel is shown on right hand side.

#### Distributed Controller IO Mappings

X1.1 IO	U112 - stop_closed	
X1.2 DI	U110 - slack_prot_sens_2	
X2.1 IO	•	
X2.2 DI	U110 - lubrication_feedback	
X3.1 IO	-	
X3.2 DI	U112 - in_pos	
X4.1 IO	-	
X4.2 DI	U112 - stop_opened	
X5.1 DI	U114 - in_pos	
X5.2 DI	U110 - slack_prot_sens_1	
X6.1 DI	U114 - lift_front	
X6.2 DI	U114 - lift_rear	•
X7.1 DO	U114 - damper_actuate	
X7.2 DO	U114 - damper_retract	
X8.1 DO	U110 - lubrication_control	
X8.2 DO	U112 - stop_open	

Options
 Only unmapped signals are selectable

All connector on the distributed controller are available for edit and are marked as DI (Input) DO (Output) or IO (Configurable as Input or Output). Each Connector has a drop-down menu populated with available connection options.

Apply

Cancel

**Tip!** There is an option to show only unmapped signals.

#### Step 5 Export IO Mapping - Optional

Click **Controls** *tab* -> *Distributed Controller group* -> *Export IO Mapping* and a pop up menu will appear.

It will export a zip file containing the total IO mapping as a csv file and one file per controller.