

Random Notes about Coselica Toolbox

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These notes refer to COSELICA Toolbox 0.4.6 under SCICOSLAB 4.4beta8.

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1 Interface to/from native Scicos

A model build with COSELICA blocks will be more often connected with one or more native SCICOS blocks than not. All ports of COSELICA blocks are *implicit* ports, therefore you have to use special interface blocks for connections from COSELICA to native SCICOS and vice versa. There are two blocks (in palette `Coselica>Blocks>Interfaces`) for such connections:

- `RealInput` (scalar value from native SCICOS to COSELICA)
- `RealOutput` (scalar value from COSELICA to native SCICOS)

Please refer to fig. 1 for an example diagram with connections from COSELICA to native SCICOS and vice versa.

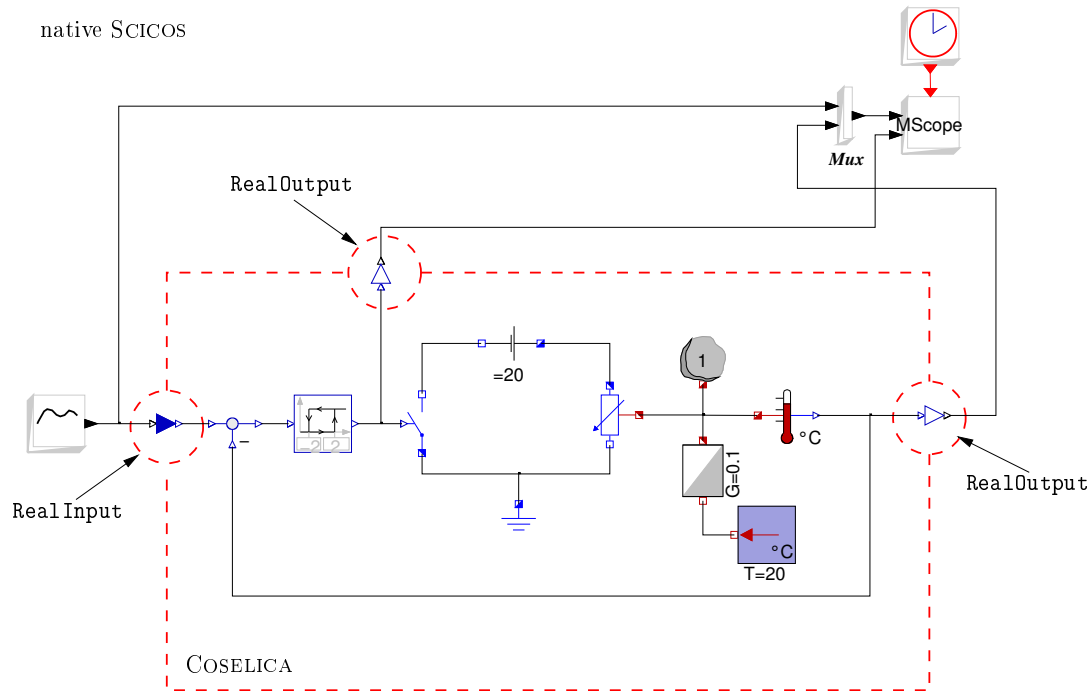


Figure 1: Connections between COSELICA and native SCICOS (example).

2 Naming of Blocks

Naming of COSELICA blocks has two advantageous effects:

- your diagram becomes more readable and informative, and
- named blocks can be spotted easily in the *Modelica Initialisation GUI* (Simulate|Modelica initialize) of SCICOS.

In order to name a COSELICA block you have to do the following:

1. Select a block in the diagram editor,
2. Right-Mouse-Button|Block Properties|Label,
3. Enter a name and press Ok.

As you can see, names of COSELICA blocks are just SCICOS block labels. They don't have to be unique, but it is advisable to use unique labels for COSELICA blocks. Furthermore, they are part of the graphical representation (icon) of a COSELICA block.

Up to and including SCICOSLAB 4.4beta7, the graphics of a diagram is not automatically updated when a block label is changed. Thus, you have to update it manually by Diagram|Replot.

3 Adjusting Size of Icon Font

Size of text in COSELICA block icons tends to be rather small. You should select View|Icon Font Option|Fix Size or View|Icon Font Option|Variable Size (default), whichever suits your needs best.

4 Obsolete Blocks

Do not use any blocks from the **Obsolete** palette for new diagrams! Try to replace these blocks in old diagrams, because they won't be available ad infinitum.

5 Getting Information about Blocks

Currently, there are no help pages at all (hopefully this will change in the future). But you can easily lookup the MODELICA source code for all COSELICA blocks by using

- your favourite text editor (with file COSELICA/macros/Coselica.mo),
- Coselica|Modelica Code, or
- Right-Mouse-Button|Block Properties|Modelica Code.