SIEMENS

SIPROTEC 5 Application Note

Porting CFC charts from DIGSI 4 projects to DIGSI 5

SIP5-APN-036, Edition 1

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Content

1 Porting CFC charts from DIGSI 4 projects in DIGSI 5

1.1 Introduction

DIGSI 5 supports a broad spectrum of exchange formats, see table with the overview of the data formats in the chapter 16.1 of the DIGSI 5 Online help. One of these data formats offer the import of the CFC logics created and tested with DIGSI 4.

This application describes how easy it is to port the CFC charts created and tested with DIGSI 4 projects into DIGSI 5.

1.2 Requirements

DIGSI 4 and DIGSI 5 are installed on the same PC with the following versions

- DIGSI V4.83 or newer
- DIGSI V6.00 or newer

1.3 Export of DIGSI 4 CFC charts

Open the project in DIGSI 4. Select the device containing the CFC charts which you want to port to DIGSI 5. Select in the context menu item Export device and in the Export dialog the file format CFC charts (*.stx). Save the file in any directory on the PC.

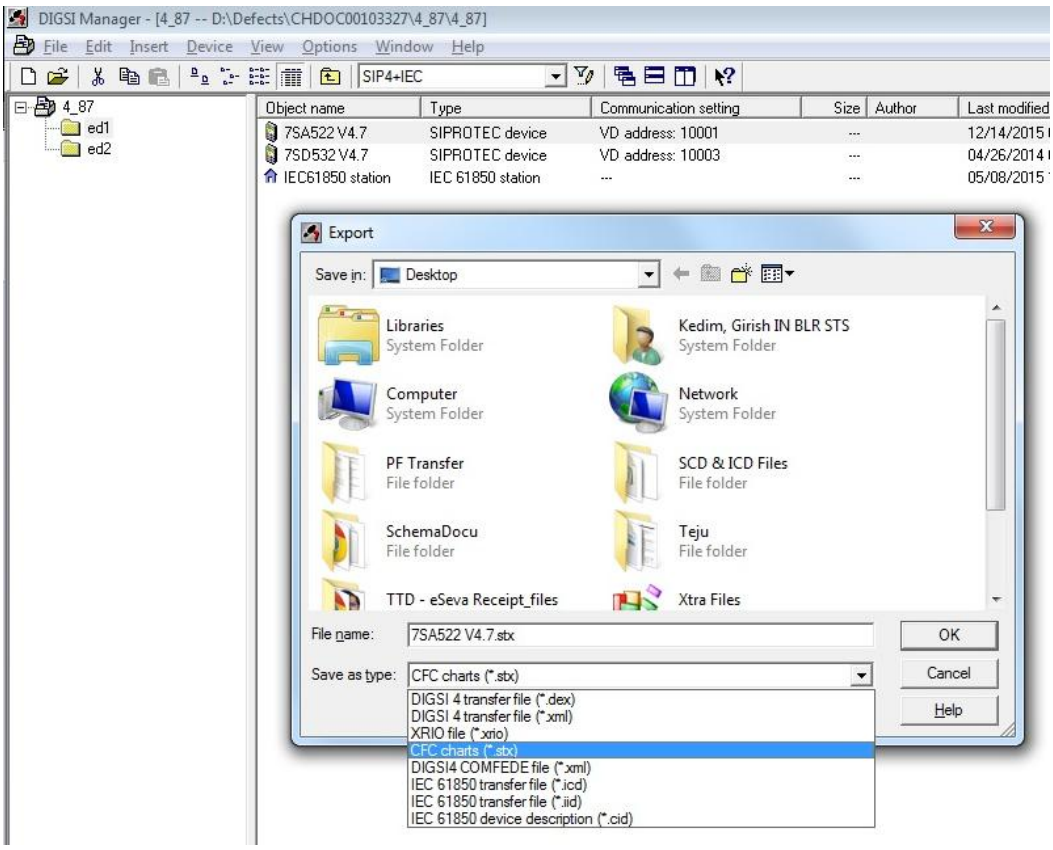
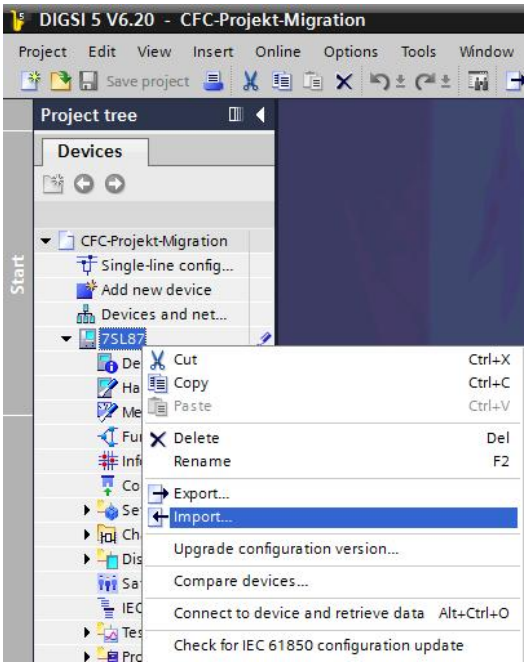


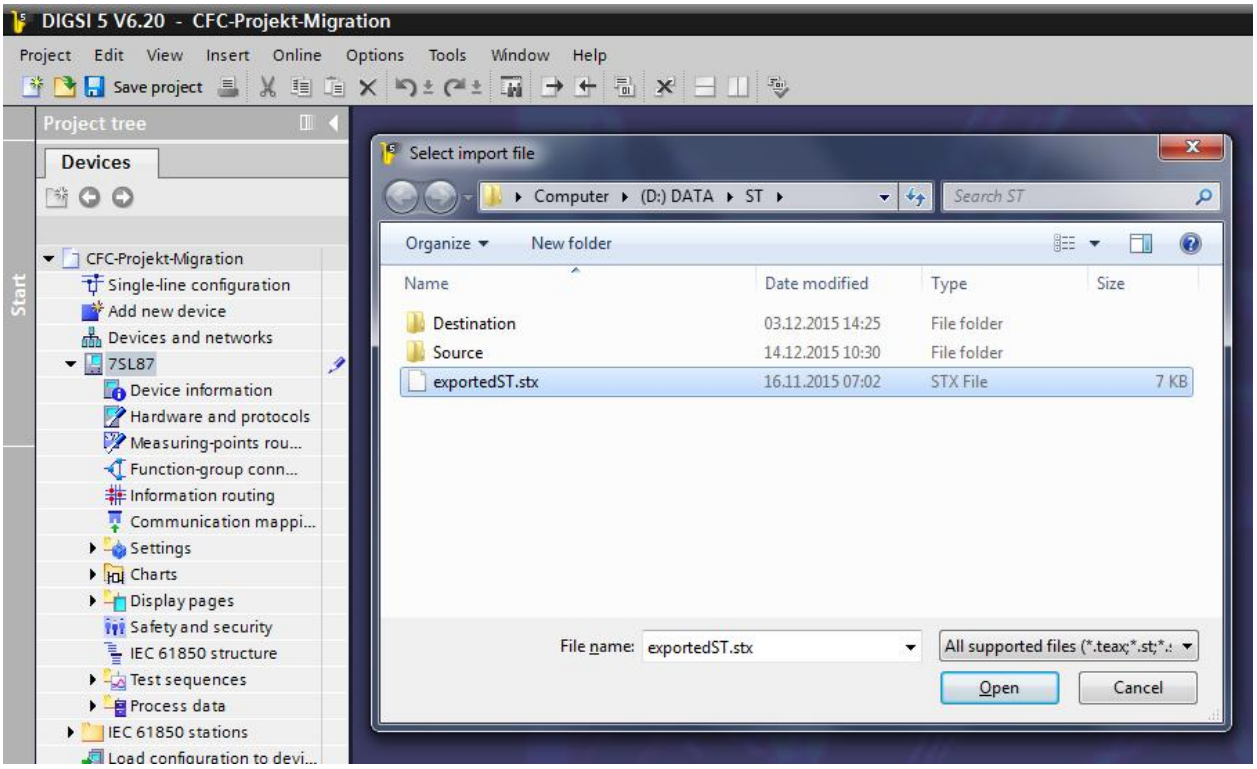
Fig. 1: Export of CFC charts (*stx) in DIGSI 4 Manager

1.4 Import DIGSI 4 CFC charts into DIGSI 5

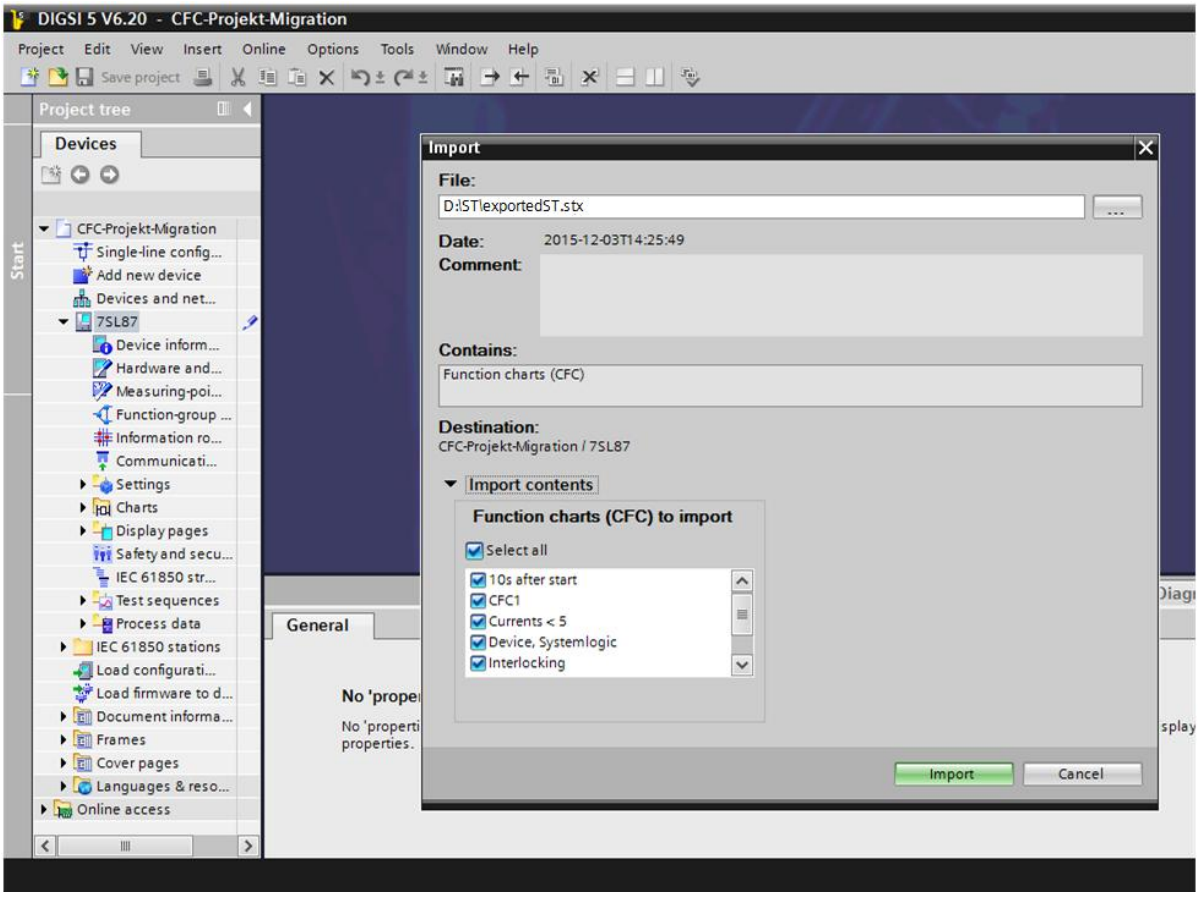
Select the destination device in DIGSI 5 in the project tree and either choose Import... from the context menu or press the respective button in the toolbar:



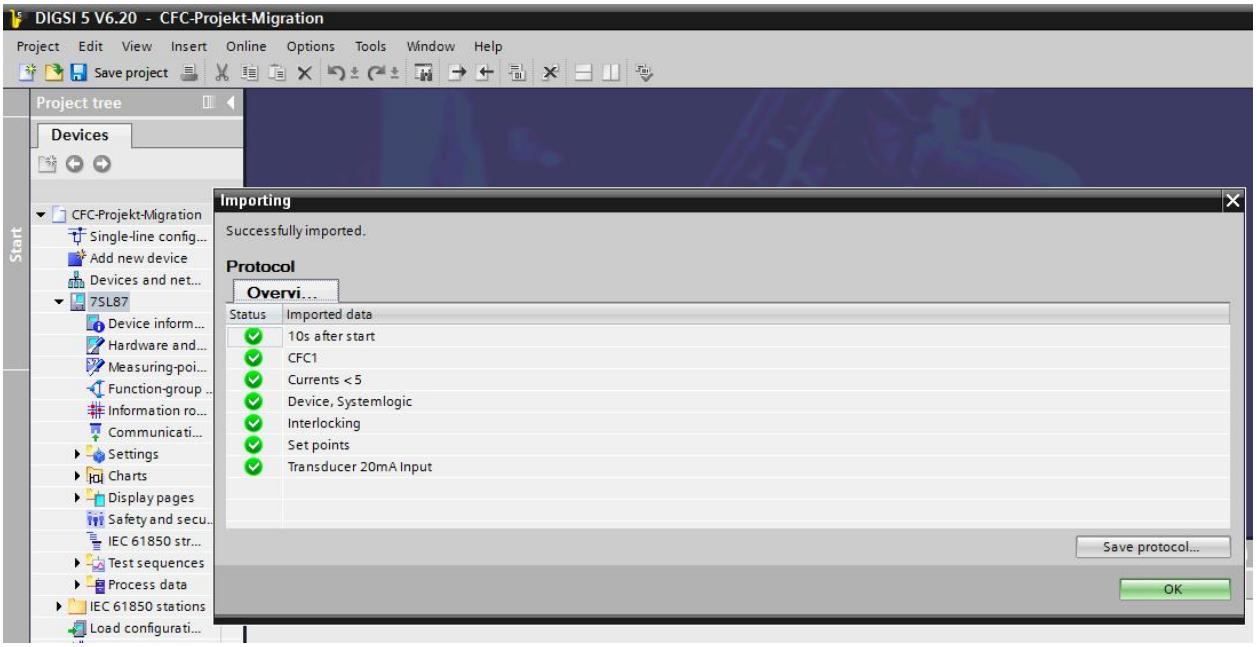
The standard dialog “Select import file” opens. Select the file containing the CFC chart information exported from DIGSI 4 and click Open:



The next import dialog shows the CFC charts available for import. Select the charts which should be imported in the section Import contents.

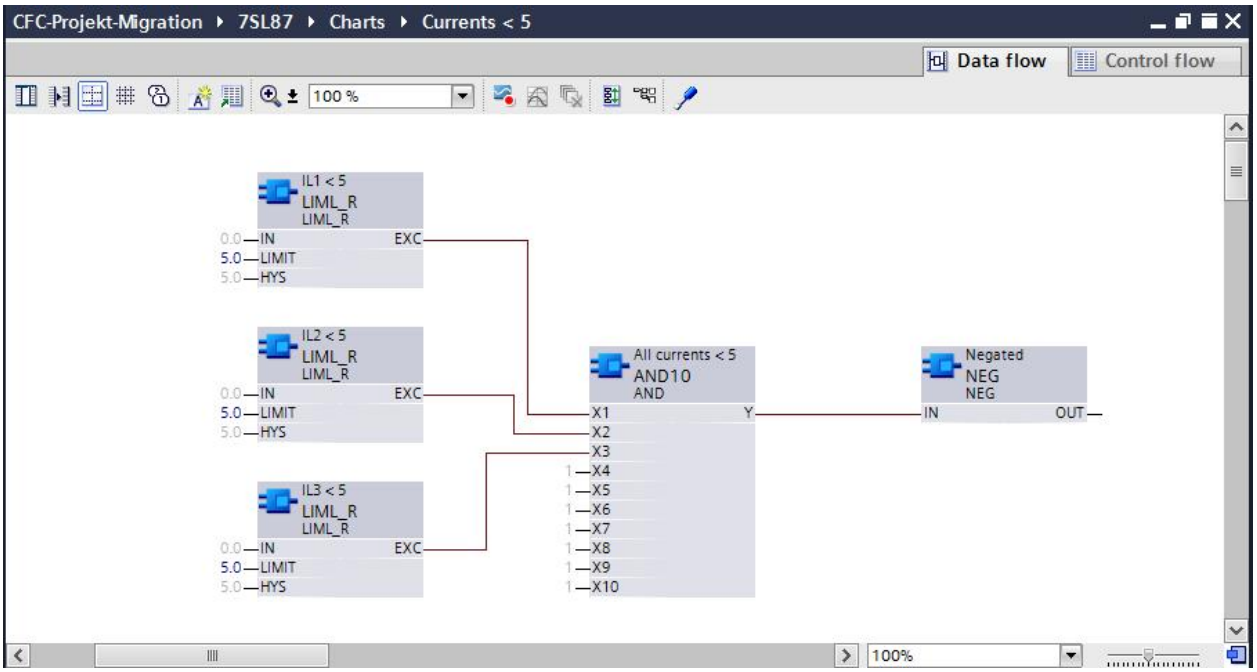


Start the import operation by clicking on Import. Status messages are indicating the import process. As soon as the import is finished, the status dialog opens which inform about the results of the import:



Finish the import process with the „OK" button.

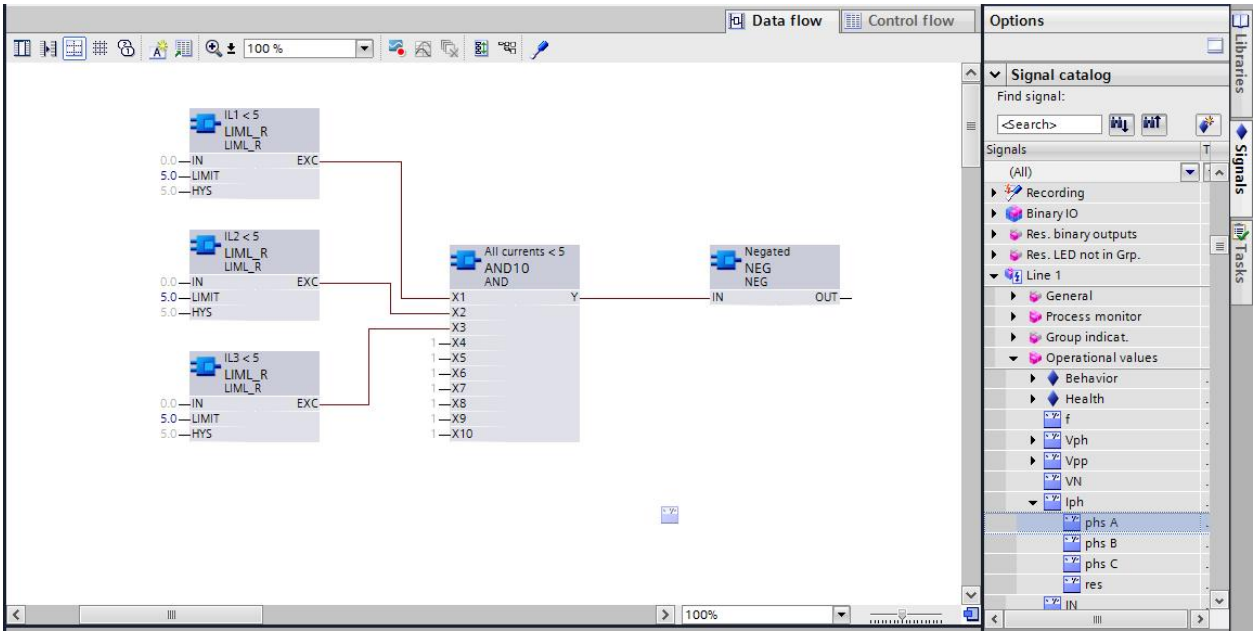
Open the imported CFC chards from the project tree on the left side for further adaptions:



In this example you can see appropriate blocks at nearly the same relative positions, interconnected with each other as in the old chart in DIGSI 4.
Note: For technical reasons some of the generic logical gates like AND and OR are extended and show more interfaces than actually needed. This does not have an effect, because the preset default constants, for example "1" on all disconnected pins of the AND gate, are valid and have no negative impact on the behavior of the logic.

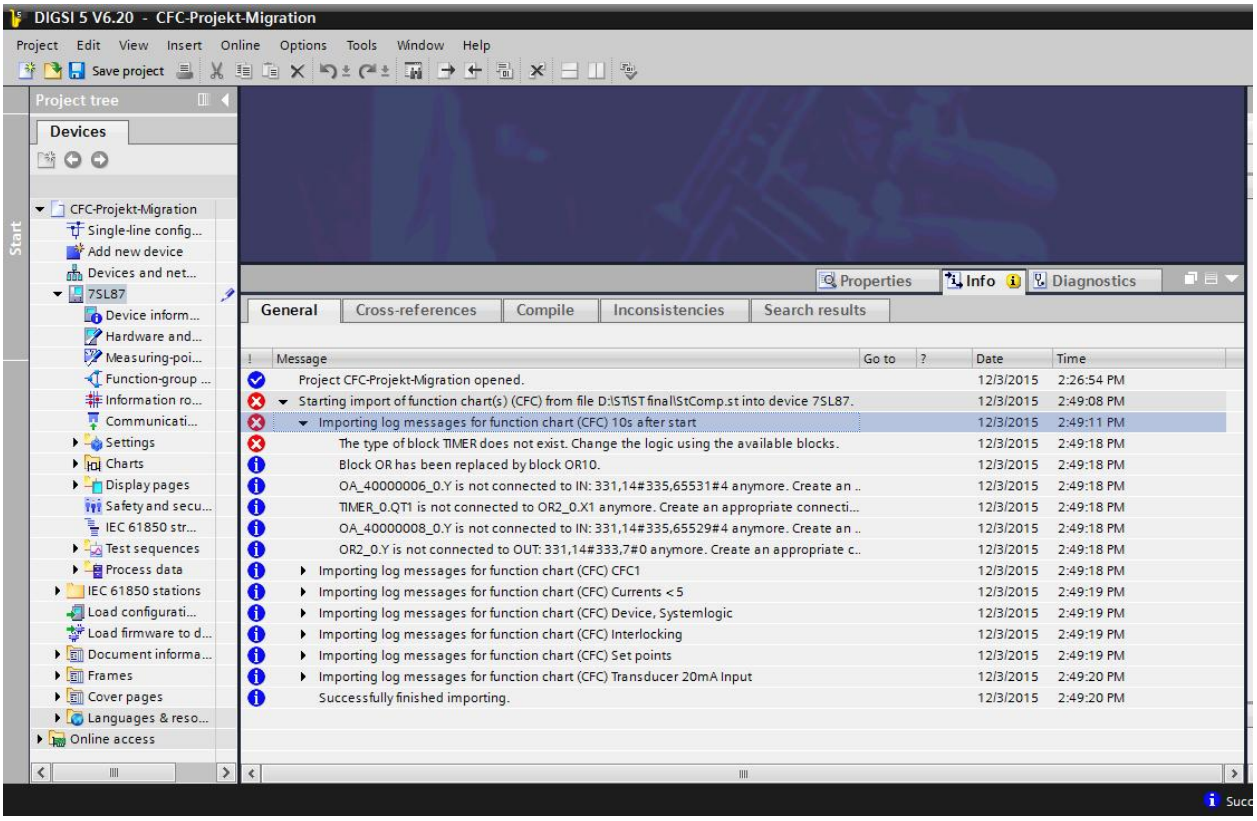
1.5 Correction of imported CFC charts

Since a SIPROTEC 5 device does have signals which differ from those in a SIPROTEC 4 device, the connections to signals outside the CFC chart have to be re-established. For this purpose, open the signal catalog on the right hand side:

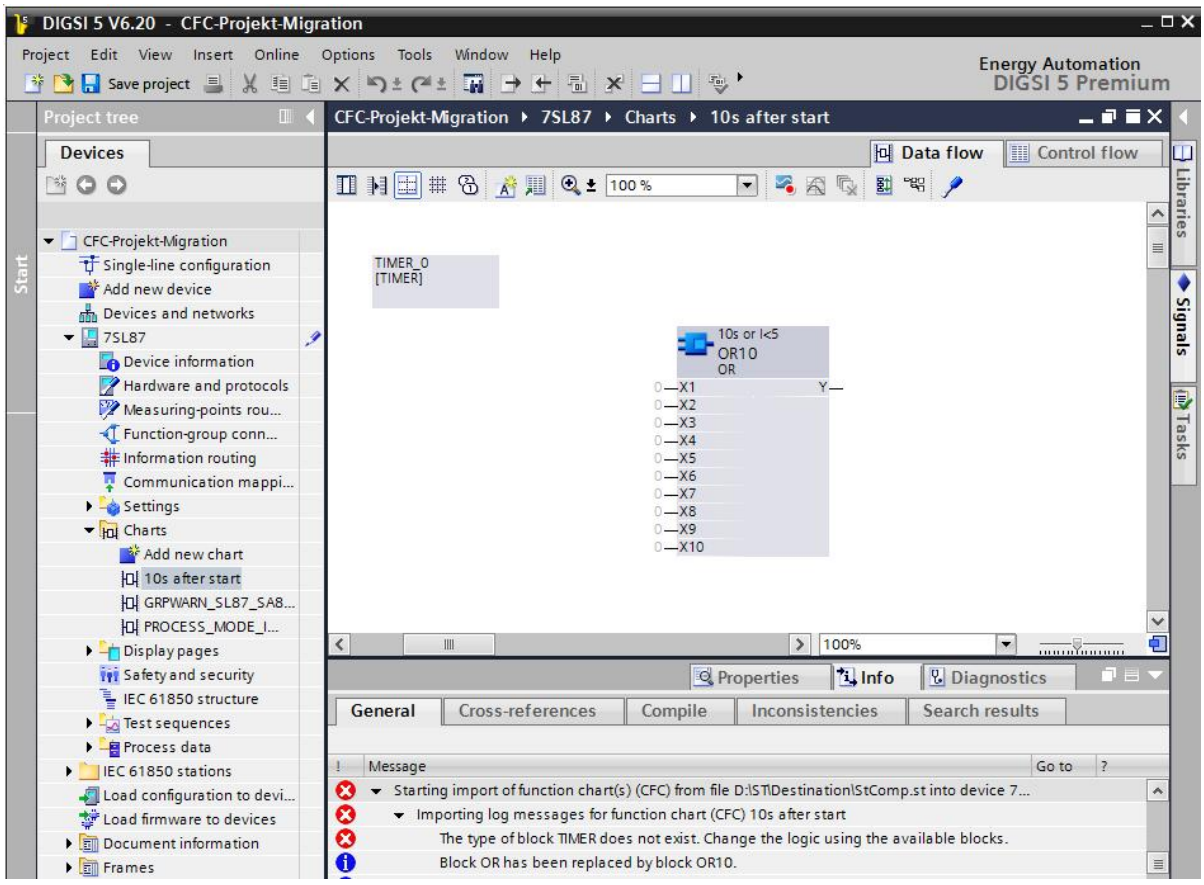


Select the required signal and drag it from the catalog directly to the pin as shown in the picture above.

Please note that some of the logic elements are different in DIGSI 4 and 5. In such a case, the respective logical blocks will only be shown as grey boxes after importing. Please correct the chart by replacing these logical blocks with equivalent ones from the DIGSI 5 library. For detailed status information regarding the import operation, open the tab Info and subtab General in the inspector window as shown below:



In this particular example, the imported CFC chart named “10s after start” contains the block named “TIMER”, which is not supported in DIGSI 5. Therefore the inserted dummy block (without interface) has to be replaced by a similar timer block from the CFC library in DIGSI 5. All other blocks contained in the imported charts have been replaced properly with the respective DIGSI 5 blocks which have the same functionality and interfaces (only the names of blocks and interfaces are different).



1.6 Summary

Openness through import and export and the broad spectrum of exchange formats support an efficient engineering. Created, tested and proven CFC charts from former DIGSI 4 projects can easily be re-used with the import function in DIGSI 5.

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