



Final deliverable

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Vers.: FINAL_DELIV_FRESH_CEIT
Date : 07/06/07
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Client : European Commission

Project : FRESH

Project N°: FP6-516059

Project Number: FP6-516059
Document number: DR_FRESH_WP5_2_2
Document Title: Tool for models management

Document status: Final
Date: 30/03/2007
Availability: Confidential
Authors: *CEIT*

Abstract **This report summarizes the work done Graphical User Interface for generation of model from block diagrams of the WP5.**

Keyword List Friendly interface, Model Editor, VHDL-AMS Editor.

SUMMARY

- 1.INTRODUCTION
- 2.MODEL EDITOR
- 3.VHDL-AMS EDITOR
- 4.CONCLUSION



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1.INTRODUCTION

A Graphical User Interface has been designed and developed to generate models from a block diagram view. This interface consist of a Model Editor and a VHDL-AMS Editor. Each Editor is described in the following paragraphs.

2.MODEL EDITOR

Thanks to the Model Editor the information about the models are showed with a user friendly interface.

The Form is divided in three frames:

A. Model Information:

The Model Information frame shows the name and the description of the Model.

B. Parameters of the Model

The Parameters of the Model frame shows the information about each parameter that the Model has. The name, type, default value, value, unit and description are the parameter features that the user can see in a table in this part of the screen.

Thanks to the three buttons added below the table, the user can create a new parameter, delete and edit a parameter that already exists in the Model.

The types of parameter that the user can define are: Integer, Float, Boolean, Predefined List and User List. The three last types allows the user to define parameters like an open swith, an aluminium wire or a parameter made by the own user.

C. Parameters of the components

In the last frame: Paramaters of the components, a table with the parameters of the component is shown. Each Model is formed by components; each component is formed by parameters also.

The name of the component, the name of the parameter, the expression and the value of each parameter are shown. The expression can be edited when the user clicks on the "Comp Edition" button.

This Model Editor has been integrated in the ALGO'TECH Simulator as it can see in the Figure 1.

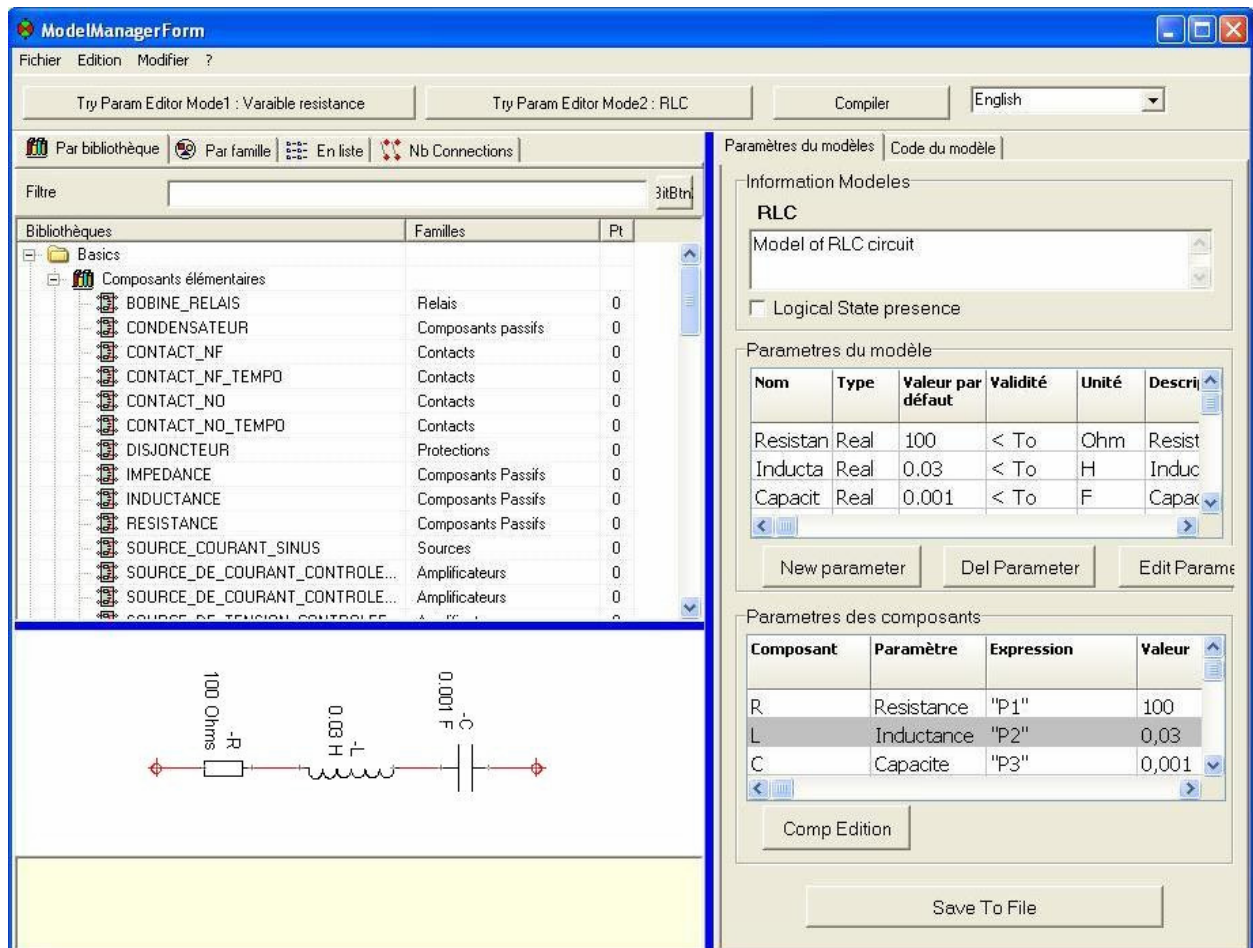


Figure 1. Main screen of the integration of the Model Editor in ALGO'TECH simulator

This application generates models from block diagram view and allows edit Models. The Simulator generates an *.INI* file from block diagram view. From this *.INI* file generated the Model Editor shows the information and allows editing them.

3.VHDL-AMS EDITOR

To show the VHDL-AMS file of the model translated by the ALGO'TECH Simulator it has designed and developed the interface shown in the figure 2.

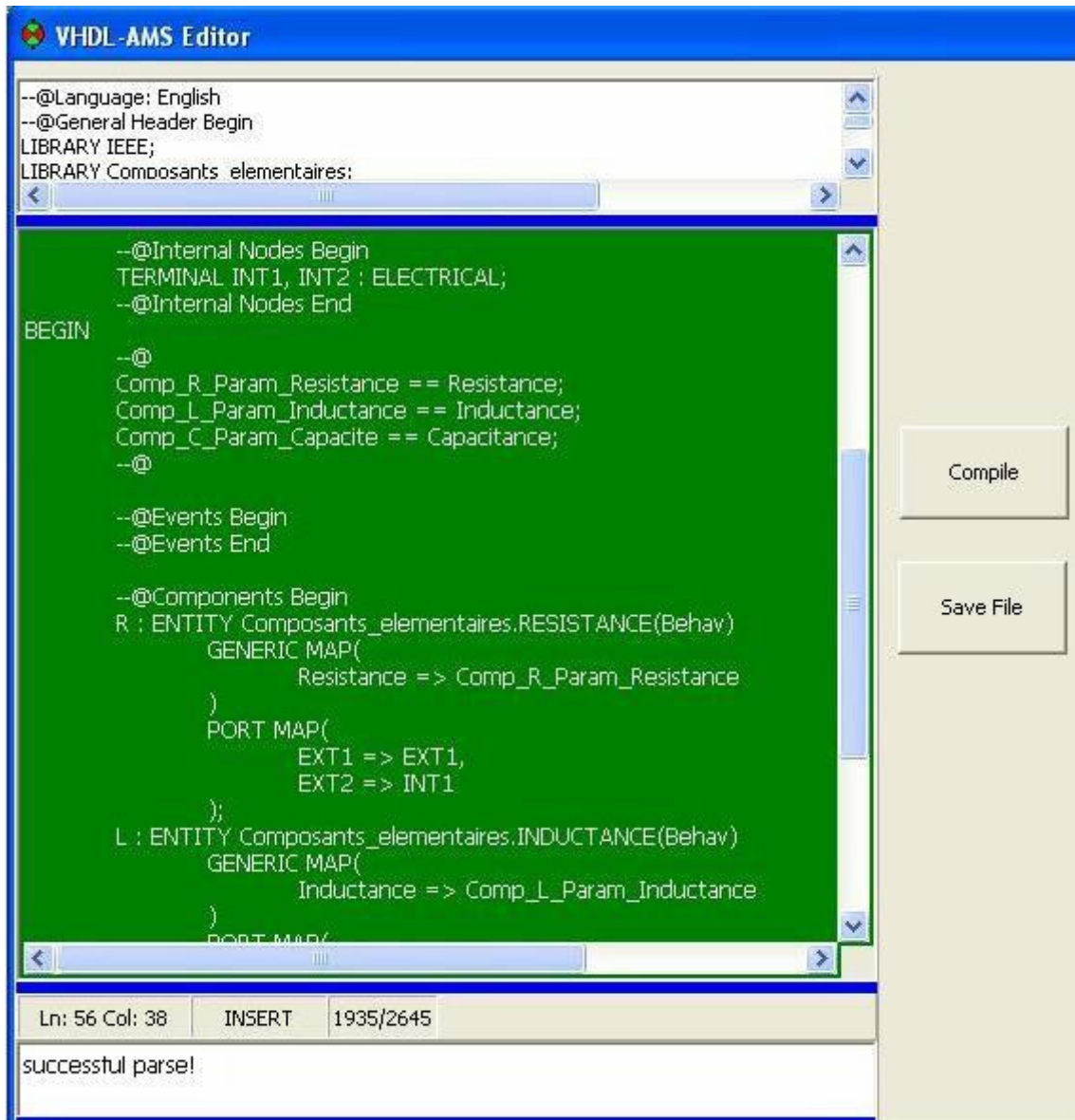


Figure 2. VHDL-AMS Editor

The VHDL-AMS Editor consists of three windows. The window above shows the code of the VHDL-AMS model. The window with the green background shows the part of the VHDL-AMS that can be editable by the user. And in the last window the message of the compiler is shown.



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4.CONCLUSION

The aim of the development of the Graphical User Interface is to make friendlier the management of the models of the ALGO'TECH Simulator.

This interface allows the user edit the models graphically. The user can delete, define and edit their parameters or edit the expressions of their components. And if the user wants to edit the code of the Model, he can do it directly thanks to the development of the VHDL-AMS Editor.