



# Which Simulink® Model Settings need to be made when using EHOOKS DEV Simulink® Integration package (EHOOKS Blockset)?

This FAQ focuses on the model settings you need to make in Simulink® when using the EHOOKS DEV Simulink® Integration package. The package works in combination with EHOOKS-DEV to enable simple integration of Simulink® models with EHOOKS for on-target bypass (OTB).

This article assumes you have already EHOOK Blockset in Simulink® integrated. If not please refer to section "Additional Info".



# The Model Configuration Parameters "Solver" and "Code Generation" in Simulink® need to be adjusted

Two things need to be taken into consideration:

- Code Generation
- Solver

The settings for both of them will be made in Simulink® within the Model Configuration Parameters. To get the dialogue for these parameters you may use "Ctrl-E" or use the Gear Icon (Figure 1)



Figure 1 Simulink® Menu - Model Configuration Parameters

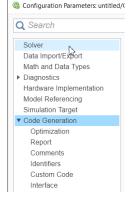


Figure 2 Simulink® - Model Configuration Parameters - Options

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The options for the settings for Code Generation and Solver are described in the following sections.

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#### **Code Generation**

Code Generation in Simulink® is controlled within a \*.tlc file - tlc stands for target language **c**ompiler

There are two \*.tlc files to choose:

- target ehooks\_grt.tlc / EHOOKS Real Time Target
- target ehooks\_ert.tlc / EHOOKS Real-Time Target for Embedded Coder (requires a license for Embedded Coder)

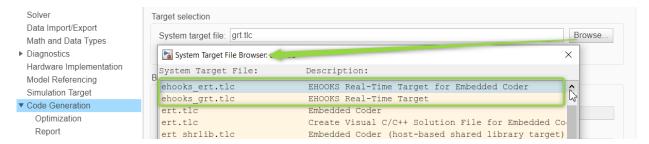


Figure 3: Configuration parameters - Code Generation - Target Selection

#### When to use which target file?

- target ehooks\_grt.tlc / EHOOKS Real-Time Target (you may use this for an OTB). Selecting this target will use the Simulink® Real-Time Workshop code generator to create the necessary C code from the Simulink® model.
- target ehooks\_ert.tlc / Real-Time Target for Embedded Coder. Selecting this target will use the Simulink® Real-Time Workshop Embedded Coder code generator to create the necessary C code from the Simulink® model.

**Note:** This code can be significantly more efficient and more suitable for running within the constrained environment of the ECU. However, a valid MATLAB / Simulink® Real-Time Workshop Embedded Coder license is required to use this target

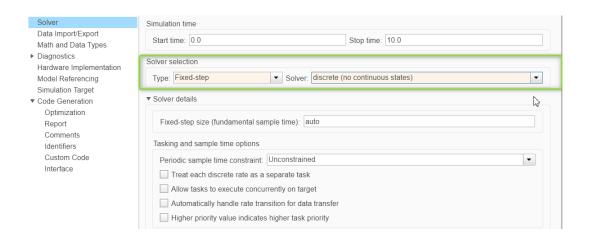
#### Solver

For the solver selection you need to make the following settings:

- Type: Fixed-step
- Solver: discrete (no continuous states)

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### **Additional information:**

How to integrate the EHOOKS-DEV Simulink® Integration package to have the EHOOKS Blockset in Simulink available

The FAQ "How to integrate the EHOOKS DEV Simulink® Integration Package into Simulink" shows how to integrate the EHOOKS-DEV Simulink® Integration Package.



### In case of further questions:

Please feel free to contact our Support Center, if you have further questions. Here you can find all information: <a href="http://www.etas.com/en/hotlines.php">http://www.etas.com/en/hotlines.php</a>

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