



Question:

Which Simulink® Model Settings need to be made when using INTECRIO MATLAB® and Simulink® connectivity

This FAQ focuses on MATLAB® and Simulink® connectivity and the model settings you need to make in Simulink®

Note: MATLAB® and Simulink® connectivity is provided by the INTECRIO integration platform without the need of further add-on installations. The integration platform contains everything required for a successful linking of Simulink® models in INTECRIO for integration and rapid prototyping.

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



Answer:

The Model Configuration Parameters in Simulink®

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)

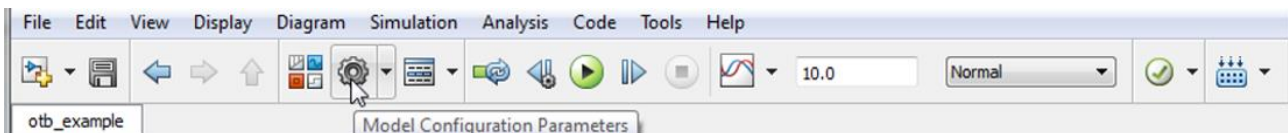


Figure 1 Simulink® Menu - Model Configuration Parameters

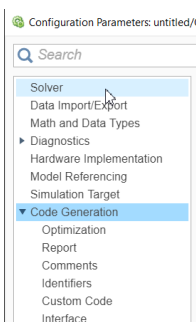


Figure 2 Simulink - Model Configuration Parameters – Options

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

Code Generation

Code Generation in Simulink® is controlled within a *.tlc file - tlc stands for **t**arget **l**anguage **c**ompiler

There are two *.tlc files you can select between (Figure 1):

- **target irt.tlc** / INTECRIO Real-Time Target
- **target ier.tlc** / INTECRIO Embedded Coder Real-Time Target (requires a license for embedded coder)

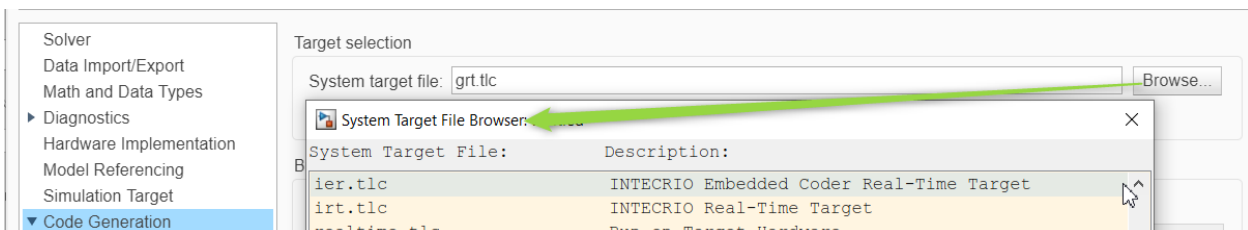


Figure 1: Configuration parameters - Code Generation - Target Selection

When to use which target file:

target irt.tlc / INTECRIO Real-Time Target

That must be selected if the Simulink® model must be further processed with INTECRIO

target ier.tlc / INTECRIO Embedded Coder Real-Time Target

That must be selected if the Simulink® model to be used in INTECRIO was created with Real-Time Workshop Embedded Coder

Solver Selection

For the solver selection it is important that you make the following settings (Figure 2):

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

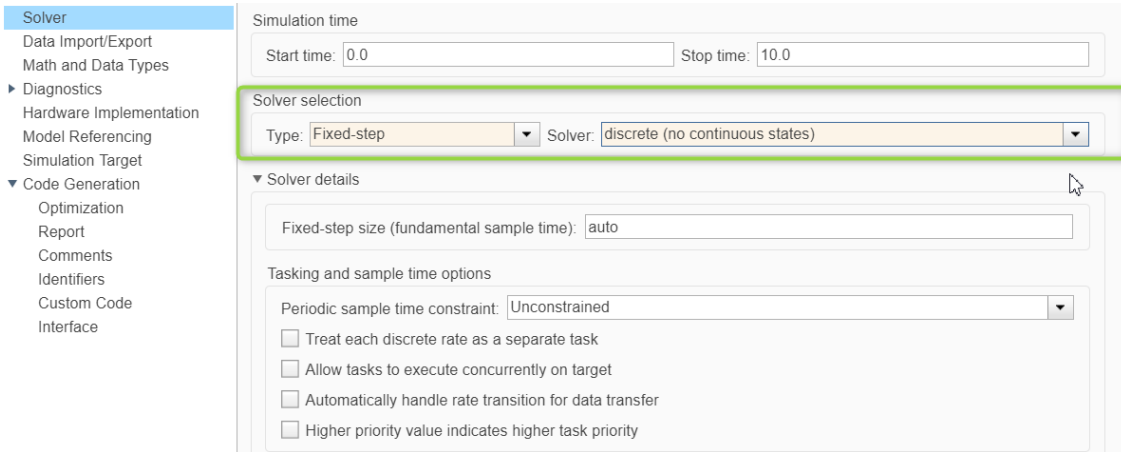


Figure 2: Simulink Model Configuration Parameters - Solver



Additional information:

How to integrate Intecrio MATLAB® and Simulink® connectivity to have the Intecrio Blockset in Simulink® available

The FAQ "How to integrate INTECRIO MATLAB® and Simulink® connectivity" shows how to integrate INTECRIO MATLAB® and Simulink® connectivity.



In case of further questions:

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

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