



Setting Solver Controls

Before running the solve, it is good practice to use the TMG Model Manager to examine the entities you have created. From the Model Manager you can access all existing entities as well as the Study Setup and the current solver control settings.

Use *Solver Control* to set up basic options for the thermal model solution, and to access more options. The selections you make on the Solver Control form control the subsequent options available on sub-forms. Select either *Steady State Solution* or *Transient Solution* to set the basic solver mode. Three other options are available on the form:

- Select *Restart* to indicate that this analysis will be based on a previous analysis, then select *Restart Control* to access options for this type of analysis.
- Select *No Temperature Calculation* to build the thermal model but not solve it for temperatures.
- Select *Process Geometry entities in groups* to use this modeling method. See *Using Geometry Groups for Thermal Modeling* under *Working with TMG, Common Tools*, for details.

Accessing Solver Parameters

The named buttons on the right side of the form provide access to additional solver parameters and options. The *Information* button (the **i** icon) sends a listing of the current settings for all solver parameters to the list region.

Select *Solver Parameters...* to access *Steady State Parameters* or *Transient Parameters* depending on the solution type you have selected. For most steady state simulations, you will not need to adjust any of the solver parameters. By default a steady state simulation uses the conditions at time=0. For a transient simulation, you must always specify parameters for the solution time span, the results output interval and the integration time step. See *Setting Steady State Analysis Parameters* or *Setting Transient Analysis Parameters* for details.

Use *Advanced...* to access advanced parameters for hard to converge models or to use special entities. See the article *Advanced Solver Options* for details.

Use *Initial Conditions...* to specify the conditions at time zero for a transient analysis, or to approximate a solution to speed convergence in a steady state analysis. See the article on *Initial Conditions* for details.

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