

Specifying and Configuring an ODE Solver (Control Design and Simulation Module)

For a given simulation, you specify and configure the [ordinary differential equation](#) (ODE) solver by using the [Configure Simulation Parameters](#) dialog box. Display this dialog box by double-clicking the Input Node of the [Simulation Loop](#). This dialog box includes the **ODE Solver** pull-down menu, which you use to specify the ODE solver of a simulation.



Note If the term **(variable)** appears next to an ODE solver, that solver has a [variable step size](#). The other ODE solvers have a fixed step size.

Configuring ODE Solver Options

If you specify a variable step-size ODE solver, you can [configure the following options](#):

- **Initial Step Size (s)**
- **Minimum Step Size (s)**
- **Maximum Step Size (s)**
- **Relative Tolerance**
- **Absolute Tolerance**

If you specify a fixed step-size ODE solver, you can configure only the **Step Size (s)** option.



Note If you are running a simulation on a real-time or embedded target, National Instruments recommends you specify a [fixed step-size](#) ODE solver.